



**Public Hearing
Information Package**

December 14, 2015 at 7:00 pm
Sooke Council Chamber
2225 Otter Point Road, Sooke, BC

**2182 Church Road
Wadams Way Comprehensive Development Zone (CD14)**

Proposed Bylaw:	Bylaw No. 622, <i>Zoning Amendment Bylaw (600-19)</i>
Zoning Amendment:	A bylaw to amend Bylaw No. 600 <i>Sooke Zoning Bylaw, 2013</i> for the purpose of creating the Wadams Way Comprehensive Development Zone (CD14) and to amend the zoning of properties located at 2182 Church Road from Large Lot Residential (R1) to Wadams Way Comprehensive Development Zone (CD14).

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 - Letter dated June 22, 2015 from Peter Cook re: Request to speak to Council
 - Public Submission dated January 21, 2015
 - Request for Service dated May 15, 2015

Please note that written and verbal submissions will become part of the public record.



2205 Otter Point Road, Sooke
Phone: 250-642-1634 Fax: 250-642-0541
email: info@sooke.ca
website: www.sooke.ca

NOTICE OF PUBLIC HEARING

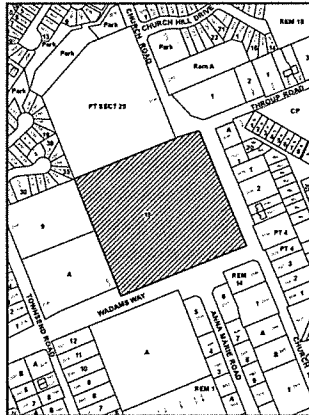
The Council of the District of Sooke will hold a Public Hearing pursuant to the provisions of the *Local Government Act* in the Council Chambers at 2225 Otter Point Road, Sooke, BC on **Monday, December 14, 2015** commencing at 7:00 pm.

Application Information:

Bylaw: Bylaw No. 622, *Zoning Amendment Bylaw (600-19)*
File No: PLN01123
Civic Address: 2182 Church Road (shown outlined in black and hatched on the subject map)
Legal Description: Lot 13, Section 10, Sooke District, Plan 1057, Except .036 of an acre thereof conveyed to the crown for road purposes as shown on explanatory plan deposited under No 684041 and except part in Plan EPP32377 (PID 008-078-416).
Applicant: David Smith, McElhanney Consulting Services Ltd. #500 - 3960 Quadra Street Victoria BC V8X 4A3

Proposal:

The purpose of Bylaw No. 622, *Zoning Amendment Bylaw (600-19)* is to rezone 2182 Church Road from "Large Lot Residential (R1)" to the proposed "Wadams Way Comprehensive Development Zone (CD14)", which will encompass a range of single family and multiple family residential uses, to a maximum of 133 residential dwelling units as described in the zone. Adoption of Bylaw No. 622 will be subject to the registration on title of Section 219 Covenants relating to road dedication, improvements and affordable housing.



Further Information:

Copies of the bylaw(s), supporting written reports and any relevant background documentation may be viewed in the "Public Notices" section of the District of Sooke website www.sooke.ca or inspected at the District Municipal Offices at 2205 Otter Point Road, Sooke, BC, between the hours of 8:30 am and 4:30 pm, Monday to Friday (excluding statutory holidays), commencing December 2, 2015 to and including December 14, 2015.

Public Input:

All persons who believe their interests in property are affected by the proposed bylaw(s) will be afforded an opportunity to be heard at the Public Hearing on the matters contained in the proposed bylaw(s). Should you have any concerns or comments you wish to convey to Council, please submit in writing by fax to 250-642-0541, email bsprinkling@sooke.ca or in person to the Corporate Officer at the District Municipal Offices no later than **Monday, December 14, 2015 at 4:00 pm**. Please be advised that submissions to Council will become part of the public record.

NOTE: Council cannot receive further information concerning this application after the Public Hearing has concluded.



DISTRICT OF SOOKE

BYLAW No. 622

A bylaw to amend Bylaw No. 600 *Sooke Zoning Bylaw, 2013* for the purpose of creating the Wadams Way Comprehensive Development Zone (CD14) and to amend the zoning of properties located at 2182 Church Road from Large Lot Residential (R1) to Wadams Way Comprehensive Development Zone (CD14).

The Council of the District of Sooke, in open meeting assembled, enacts as follows:

1. This bylaw is cited as *Zoning Amendment Bylaw (600-19)*.
2. Bylaw No. 600, *Sooke Zoning Bylaw, 2013* is amended by adding immediately following Schedule 813 in **Part 5 – Zones** the following as Schedule 814 - *Wadams Way Comprehensive Development Zone (CD14)*:

"Schedule 814 – Wadams Way (CD14)

Wadams Way CD Zone

CD14

814.1 Purpose: This zone provides for a variety of residential uses that will include single and multiple family residential housing units with varying lot sizes.

814.2 Permitted Uses:

General Uses:

Gravel extraction for on-site development and on-site and off-site municipal services directly attributable to the on-site development shall be permitted.

**Principal Uses Area A:
Single Family Residential**

- a) Horticulture
- b) One single family dwelling or one duplex per lot*
- c) One temporary construction and real estate marketing office in Area A

**Principal Uses Area B:
Single Family/Multi Family Residential**

- a) Apartment building*
- b) Assisted living facility*
- c) Cluster dwelling units*
- d) Horticulture
- e) Townhouse*
- f) One single family dwelling or one duplex per lot*
- g) One temporary construction and real estate marketing office in Area B

**Principal Uses Area C:
Multi Family Residential**

- a) Apartment building*
- b) Assisted living facility*
- c) Cluster dwelling units*
- d) Townhouse*

* See conditions of use

Principal Uses Area D:

- a) Park
- b) Institutional accessory to a park use
- c) Assembly
- d) Playground

Accessory Uses:

On a lot with Apartments, Cluster dwelling units, Townhouses:

- a) Limited home-based business

On a lot with one single family dwelling or one duplex:

- a) Bed and breakfast*
- b) Boarding and lodging
- c) Home-based business
- e) Vacation accommodation unit

On a lot with one single family dwelling:

- a) One secondary suite

814.3 Conditions of Use for Area A:

- a) Single family dwelling permitted on lots 11 m or more in width;
- b) Bed and breakfast permitted on lots 600 m² or larger;
- c) Duplex permitted on lots 600 m² or larger in area and 11 m or more in width;

814.4 Conditions of Use for Area B:

- a) Single family dwelling permitted on lots 11 m or more in width;
- b) Bed and breakfast permitted on lots 600 m² or larger in a single family dwelling or duplex;
- c) Duplex permitted on lots 600 m² or larger in area and 11 m or more in width;
- d) Apartment building, assisted living facility, cluster dwellings and townhouses are permitted on lots 1000m² or larger in area and 30 m or more in width;

- e) Single family dwellings and duplexes are not permitted on a lot containing an apartment, assisted living facility, cluster dwelling units or townhouses.

814.5 Conditions of Use for Area C:

- a) Apartment building, assisted living facility, cluster dwellings and townhouses are permitted on lots 1000m² or larger in area and 30 m or more in width;

814.6 Subdivision Regulations:

- a) Minimum lot area for Areas A and B - 350 m²
- b) Minimum lot area for Area C – 1,000 m²
- c) Panhandle lots are not permitted

814.7 Maximum Dwelling Unit Density: The number of dwelling units of all types in Areas A, B and C shall not exceed 133, and for this purpose a bed-sitting room in an assisted living facility constitutes a dwelling unit, but a secondary suite does not constitute a dwelling unit.

814.8 Maximum Height:

- a) Single family dwelling or Duplex - 10.5 m
- b) Apartment, assisted living facility, cluster dwelling units or townhouses – 20m
- c) Accessory buildings – 4 m

814.9 Maximum Lot Coverage: 45%

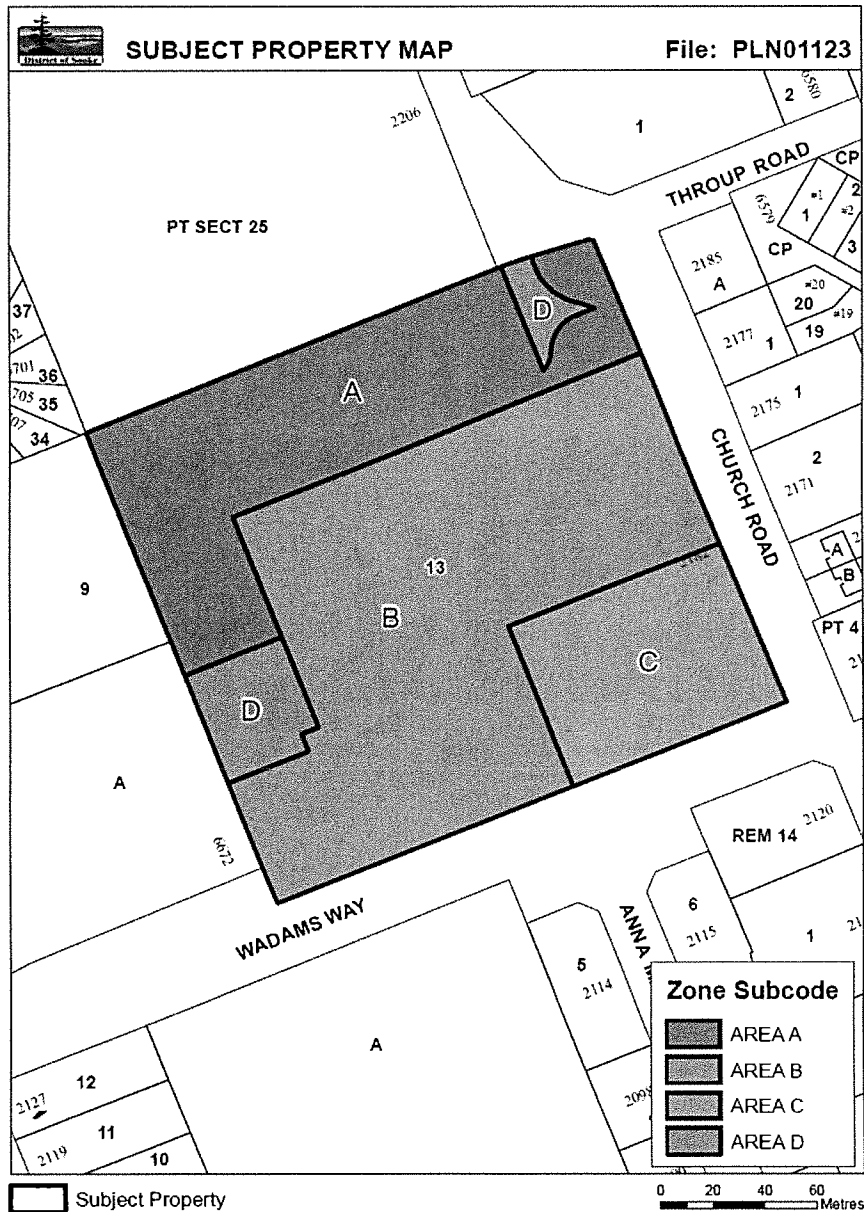
814.10 Minimum Setbacks:

Use	Front Lot Line	Flanking Lot Line	Side Lot Line	Rear Lot Line	Lane Lot Line
Single family or Duplex	4.5 m – dwelling portion 6 m – garage/ carport portion	2 m	1.2 m	3.5 m	1 m
Apartment, Assisted Living Facility, Cluster dwelling units, Townhouse	3 m	3 m	3 m	4.5 m	1 m
Accessory Building or Structure	7.5 m	4.5 m	1.2 m	4.5 m	0 m

814.11 Minimum Amenity Area for Areas B and C: 8%, for lots containing

apartments, assisted living facility, cluster dwelling units or townhouses.

814.12 Subject Property Map: The official map for this CD Zone is kept by the Corporate Officer, and forms part of this bylaw. The Subject Property Map is provided for information purposes only.



3. Bylaw No. 600, *Sooke Zoning Bylaw, 2013* is further amended in **Schedule A – Zoning Map** by changing the zoning from *Large Lot Residential (R1)* to *Wadams Way Comprehensive Development Zone (CD14)* on the property shown hatched and outlined in black on Schedule A to this bylaw and legally described as:

Lot 13, Section 10, Sooke District, Plan 1057, Except .036 of an acre thereof conveyed to the crown for road purposes as shown on explanatory plan deposited under No 684041 and except part in Plan EPP32377

4. Bylaw No. 600, *Sooke Zoning Bylaw, 2013* is further amended in the table in section 5.1, "Zones" of **Part 5 – Zones** by adding the following in the "Comprehensive Development & Mixed Use (CD) Zones" section:

Wadams Way	CD14	814
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5. If any portion of this bylaw is set aside by a Court of competent jurisdiction, the portion is severed and the valid remainder shall remain in force and effect.

Introduced and read a first time the 23rd day of November, 2015.

Read a second time the 23rd day of November, 2015.

Public Hearing held the day of , 2015.

Read a third time the day of 2015.

Approved by the Ministry of Transportation and Infrastructure the day of , 2015.

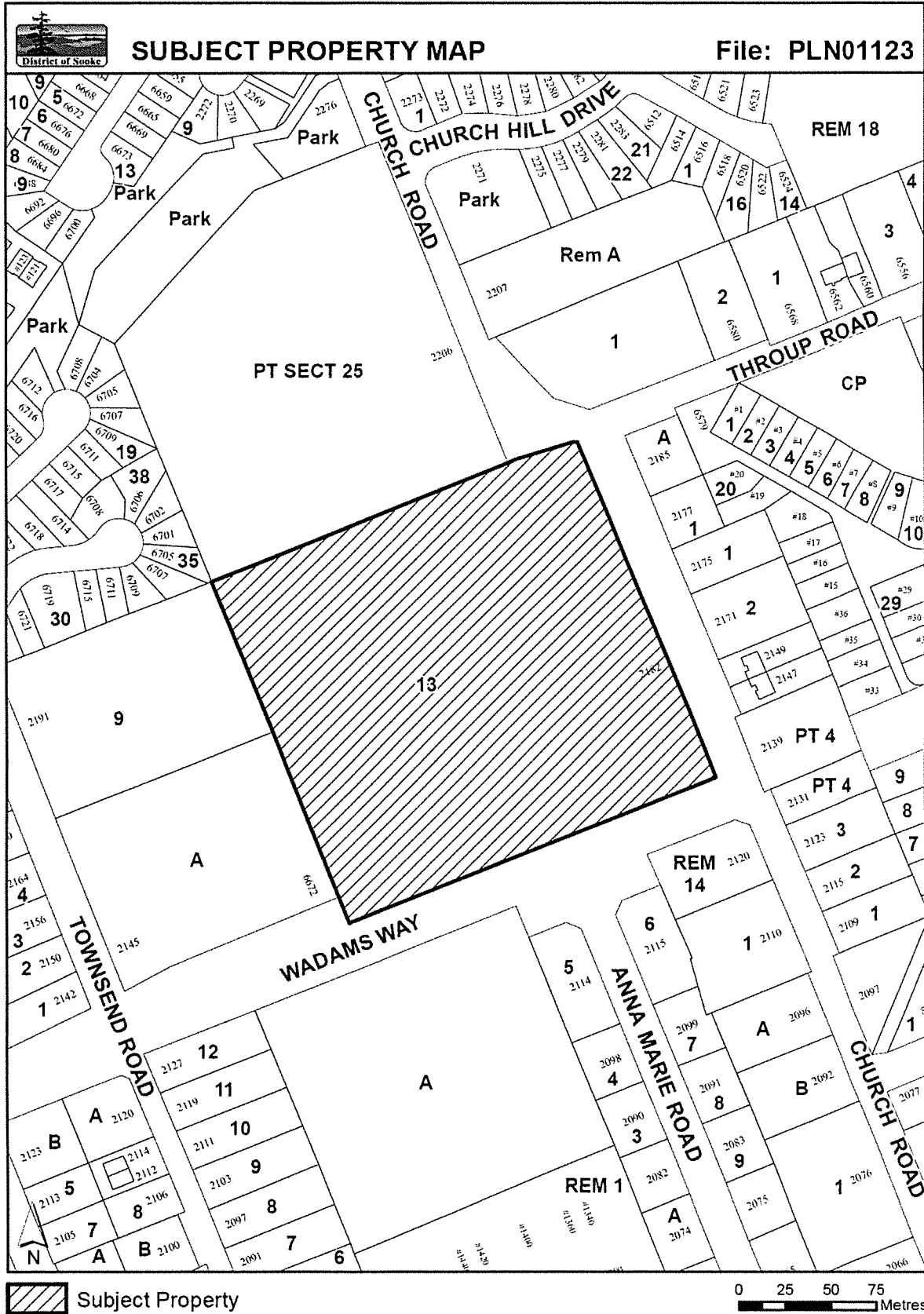
Adopted on the day of , 2015.

Maja Tait
Mayor

Bonnie Sprinkling
Corporate Officer

FOR INFORMATION ONLY: Section 219 Covenants registered in the Victoria Land Titles office under numbers **

SCHEDULE A



B-1 Bylaw No. 622, Zoning Amendment Bylaw (600-19) – Wadams Way Comprehensive Development Zone

Michael Dillabaugh provided a powerpoint presentation and summary of the rezoning application for Wadams Way Comprehensive Development Zone.

Peter Cook, property owner of 2182 Church Road, reminded Council that they worked collaboratively with the District to sell a portion of the property for Wadams Way which resulted in a community improvement to be proud of. They have now decided to revisit the zoning of the property to a Mixed Comprehensive Development Zone to create flexibility prior to a future sale of the property. Mr. Cook stated that as the community grows, so does the need for amenities and that they have agreed to the provision of amenity contributions and affordable housing, including a cash contribution for the Church Road and Throup Road intersection improvements and a screening fence.

David Smith, McElhanney Consulting Services, provided a powerpoint presentation and advised that the owners of the property wished to develop a zone that would provide flexibility to changing markets for new potential owners of the property; they feel the development will benefit the community, The applicant agrees to the amenity contribution and affordable housing in the amount of \$309,835.

MOVED and seconded that Bylaw No. 622, *Zoning Amendment Bylaw (600-19)* be introduced and read a first time.

CARRIED UNANIMOUSLY

MOVED and seconded that Bylaw No. 622, *Zoning Amendment Bylaw (600-19)* be read a second time.

CARRIED UNANIMOUSLY

MOVED and seconded to direct staff to schedule a Public Hearing for Bylaw No. 622 in accordance with the requirements of the *Community Charter* and the *Local Government Act*.

CARRIED UNANIMOUSLY

MOVED and seconded that prior to final adoption of Bylaw No. 622, the owner enter into section 219 covenants with the District of Sooke to address additional infrastructure improvements and affordable housing, and that Council authorize the Mayor and the Chief Administrative Officer to execute those documents.

CARRIED UNANIMOUSLY



DIRECTION REQUEST

Regular Council

Meeting Date: November 23, 2015

To: Gord Howie, Chief Administrative Officer

From: Planning Department

Re: 2182 Church Road – Proposed Wadams Way Comprehensive Development Zone

RECOMMENDATION:

THAT COUNCIL introduce and give first and second reading to Bylaw No. 622, *Zoning Amendment Bylaw (600-19)*;

AND THAT COUNCIL direct staff to schedule a Public Hearing for Bylaw No. 622 in accordance with the requirements of the *Community Charter* and the *Local Government Act*

AND FURTHER THAT COUNCIL direct that prior to final adoption of Bylaw No. 622, the owner enter into section 219 covenants with the District of Sooke to address additional infrastructure improvements and affordable housing, and that Council authorize the Mayor and the Chief Administrative Officer to execute those documents.

1. Executive Summary:

The purpose of this application is to rezone 2182 Church Road from Large Lot Residential (R1) zone to the proposed Wadams Way Comprehensive Development Zone. The Wadams Way CD Zone would allow for a maximum of 133 residential units that could range from single family, duplex, apartment building, assisted living facility, cluster dwellings, or townhouses. The intent of the CD Zone is to create flexibility to allow for a future developer of the land to adapt to market conditions. The CD Zone does not include commercial uses, in order to avoid competition with development in the Town Centre.

The property is centrally located in the community, falls within the Community Growth Area, and is located within the Sooke Core Sewer Specified Area (SSA). The land use designation for this property within the *Official Community Plan Bylaw, 2010 (OCP)* is "Community Residential". The proposed zone is consistent with the intent of the OCP's policies and objectives.

The Applicant has negotiated an amenity package, which secures amenity and affordable housing contributions. Those have been addressed in two separate S.219 Covenants, which will be registered prior to adoption of this bylaw.

2. Background:

The property, 2182 Church Road, is well situated for future development. It is 10.4 acres in size and is located in the centre of Sooke along two collector roads; Church Road and Wadams Way. It is within the Community Growth Area, designated Community Residential in the OCP, and is in the SSA.

The site is bounded to the north by a mobile home park, to the east by large lot residential dwellings, to the west by the Sooke Child, Youth & Family Centre, and to the south, the Town Centre and the newly constructed Wadams Way.

Currently, the site contains one single family dwelling and two accessory structures. Approximately 70% of the property has been cleared and is used livestock grazing. The property has been owned by the current Owners' family for over 72 years. The Owners do not wish to develop the site, and do not have a development plan for the property. They do, however, wish to provide more flexibility than a conventional zone, in order for a future owner/developer to more easily adapt to market conditions over time.

3. Proposal:

The Owners propose to rezone the property in line with the vision for Community Residential (CR) Area within the OCP. Consideration has been taken in creating the Wadams Way CD Zone in order to achieve the vision outlined in the OCP, while incorporating the flexibility desired by the applicant to respond to changing markets.

There are four potential zoning areas proposed for the site:

- Area A** – Single Family Residential (consistent with R3 character)
- Area B** – Single Family/Multi Family Residential (an area that could be either R3 and/or RM2 character)
- Area C** – Multi Family Residential (consistent with RM2 character)
- Area D** – Proposed park/drainage areas (approximately 0.5 acres)

It is important that the overall site density be consistent with the OCP. The zone allows for density to move around the site, but the site will not exceed 133 residential units. For these purposes, suites are not considered a 'residential unit' and will not count toward the overall site density. However, an assisted living unit is considered a residential unit, and will count toward the total site density.

Parameters around lot sizes, subdivision considerations, heights, lot coverages, amenity areas and setbacks are all consistent with the R3 and RM2 zones in the existing zoning bylaw.

4. Analysis:

The OCP policy context has been attached to this report, providing language that supports medium density residential development in this location. (See attached)

5. Amenity Contribution & Affordable Housing:

The proponent has confirmed that they will contribute 10% of the units proposed for the site as affordable units, or provide \$10,000 cash in lieu per affordable housing unit, to a maximum of \$130,000 toward the District's affordable housing reserve fund.

Based on direction from Committee of the Whole on September 8, 2015, the applicant has offered, as an amenity, the land required for the future construction of a round about at Church and Throup Road (valued at \$151,335), and a contribution toward the interim intersection realignment for that intersection (valued at \$28,500). The total amenity and affordable housing package is therefore valued at \$309,835.

ACTION: Staff would like to bring this amenity offer forward for Council's discussion and consideration.

6. Servicing

Traffic:

The applicant has submitted a **Traffic Impact Assessment (TIA)** that was prepared by Boulevard Transportation Group in January 2015. The recommendations within the TIA will be completed implemented when the property is redeveloped.

The Church Road and Throup Road intersection must be dedicated and then constructed to an interim standard that improves vehicular and pedestrian safety, or provide cash in lieu of those improvements. This will be secured in a Section 219 covenant.

Upgrades along the frontages of Church Road and Wadams Way will be in accordance with Bylaw 404. The Wadams Way frontage will be constructed to the Connector Standard, and will also include the optional works within the 25 m road right of way, as per SDD-R11. The Church Road frontage will be constructed to Connector Standard SDD-R11 (attached).

Screening:

It is required that the owner install screen fencing along the residential properties to the north and the west property lines of 2182 Church Road. This will also be included in the s.219 covenant.

Sewer:

The site is located within the Sewer Specified Area, and can connect to the District of Sooke sewer system. Due to the potential increase in density, a sewer serviceability review was completed to review the capacity of downstream sewers. All costs associated with upgrading and installing the downstream systems will be borne by the future developer.

7. Environmental

A **Riparian Areas Regulation Assessment Report (RAR)** was prepared for the subject property in November 2014 by a Qualified Environmental Professional (QEP) from Brian Wilkes and Associates Ltd. Two watercourses bisect the subject property; one is located in the south-east corner and cuts across the property for approximately 65m. The second watercourse runs the length of the property parallel to the north property boundary. The Riparian Area Assessment states that a 2 meter Streamside Protection and Enhancement area (SPEA) is appropriate for both watercourses. This report has been reviewed and accepted by Ministry of Environment. The future developer will be responsible for satisfying the requirements associated with the RAR.

8. Legal Impacts:

Prior to 4th Reading of this proposed Zoning Amendment, the applicant will be required to enter into a Development Agreement for road dedications and upgrades required outside of Bylaw 404, and a s.219 covenant addressing future housing agreement requirements.

9. Financial Impacts:

The costs associated with offsite improvements and development must follow District of Sooke Bylaws and regulations and be paid for by the owner/future developer at the time of development. The current applicant will be responsible for paying all legal costs of registering the covenants.


10. Implication of Recommendation:

Approval of the application is recommended for the following reasons:




- This site is located in the Community Residential Area of the OCP; an area designated for residential growth.
- The site is well situated to enhance overall pedestrian connectivity, improving future residents' walkability and bikeability.
- Increased density will support improved access and servicing for public transit.
- The rezoning meets the policies and objectives of the OCP.
- The site has access to all municipal services.
- The development of this site will facilitate road dedications and road improvements at the Church Road/Thrup Road intersection, as well as further road frontage improvements along Church Road and Wadams Way.
- Affordable housing or cash in lieu to the reserve fund will be made in connection to 10% of the residential units proposed for the site.

Attached Documents:

1. Application Summary
2. Policy Context (OCP and Town Centre Plan)
3. Referral Agency Comments
4. Subject property map and aerial photo
5. Draft S. 219 Development Agreement
6. Draft S. 219 Housing Agreement
7. Draft Bylaw No. 622
8. Draft Wadams CD Zone
9. Traffic Impact Assessment (January 12, 2015)
10. Riparian Areas Assessment (November 3, 2014)
11. Sewer Serviceability Review (June 19, 2015)



Katherine Lesyshen, MCIP, RPP
Planner II

Approved for Council Agenda	
 _____ Engineering	_____ Planning
 _____ Corp. Services	_____ Finance
 _____ CAO	

Application Summary

Address	2182 Church Road
Legal	Lot 13, Section 10, Sooke District, Plan 1057, Except .036 of an acre thereof conveyed to the crown for road purposes as shown on explanatory plan deposited under No 68404I and except part in Plan EPP32377
Existing Zoning	Large Lot Residential (R1)
Proposed Zoning	Wadams Way Comprehensive Development Zone
Existing OCP	Community Residential
Proposed OCP	n/a
Parcel Size	4.21ha (10.4 acres)
DP Area	DPA #2, DPA #3
Services	Water: CRD Water Sewer: Municipal Drainage: On-site
Adjacent Land Uses	North: Manufactured Home Park South: Wadams Way & Town Centre Boundary East: Large Lot residential West: Sooke Child, Youth & Family Resource Centre

Present Zoning and Proposed Zoning

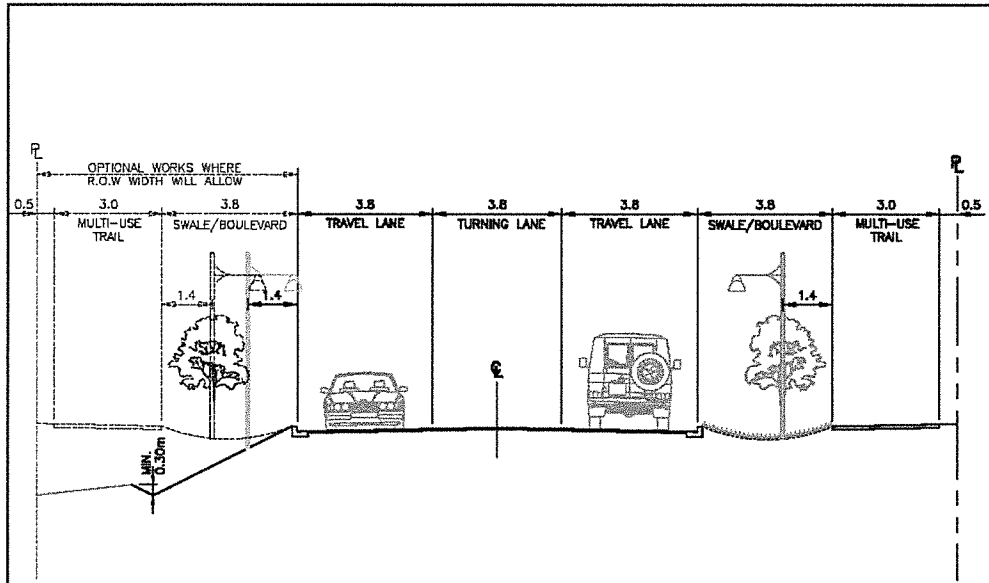
	Present Zoning	Wadams Way CD Zone		
	R1	Area A	Area B	Area C
Present and Proposed Zoning	R1	Area A	Area B	Area C
Minimum Lot Size for Subdivision	1000 m ²	350 m ²	350m ²	1000m ²
Maximum Height of Principle Building	12 m	10.5 m	10.5m for SFD's or 20m for Multi	20m
Maximum height accessory building	9 m	4 m	4 m	4 m
Maximum Lot Coverage	30%	45%	45%	45%

Summary of Referral Agency Comments [originals are in the file]

EXTERNAL REFERRALS	
Agency	Comments
BC Hydro	No objections to the rezoning application.
Ministry of Transport and Infrastructure	The ministry has no objections to the proposed rezoning and has no additional requirements for approval. Please forward the certified bylaw forms to our office for completion at your convenience.
Canada Post	No response.
BC Transit	<ol style="list-style-type: none"> 1) The proposed site is located directly on a transit route and has a transit stop located opposite the property. 2) It is expected to be a significant trip generator. 3) The existing transit route, the 63 Otter Point Community Bus, currently provides one-way service and operates in a loop. This is a weekday-only, basic service route (4 trips per day) through rural Sooke. The route connects at Sooke Town Centre with the 61 Sooke/Langford/Downtown conventional service. 4) Particularly as the proposed development potentially includes higher density multi family residential units, in the future two-way service may be desirable on this route. Two-way service would require a new transit stop to be located on Church Road adjacent to this facility, and a shelter and bench would also be recommended. 5) The proposed densities are supportive of transit. 6) As the existing transit stops along Church Road are not universally accessible, it is recommended that accessible pads be installed. 7) Provisions should be made for room to accommodate a future transit stop, shelter, and bench. 8) BC Transit has no objection to the proposed development as it is consistent with transit-supportive land use.
Beecher Bay	No response.
CRD Water	<p>Community piped water can be supplied to the proposed development provided that the owner(s) is prepared to pay all necessary costs and fees authorized under CRD Bylaws for the supply and installation of a water distribution system capable of meeting all domestic and fire flow requirements, designed in accordance with CRD Specifications and Standard Drawings. The existing property is currently serviced with water by a 19mm (3/4") water service located at the property frontage on Church Road. The Owner shall pay all costs to abandon this service if not required for this development.</p> <p>If the proposal proceeds to the development stage, a detailed review of water servicing design drawings will be required, and a detailed statement of conditions will be provided.</p> <p>The CRD hydraulic computer model shows a fire flow of 15,000 L/min (3,300 lpm) with at least 138 kPa (20psi) residual pressure in the water main adjacent to the fire hydrant (SFD196) located at the intersection of Church Road and Wadams Way.</p> <p>The Owners engineer will be required to calculate the fire flow requirements to confirm in writing that the CRD system is sufficient. The owners engineer should contact the District of Sooke to discuss hydrant location and orientation.</p> <p>If an increase in the level of fire protection is required to meet CRD Engineering Specifications and Standard Drawings, FUS or to meet DoS</p>


	<p>requirements, the Owner would be responsible for all costs associated with designing and upgrading the distribution system to provide the require flows.</p> <p>Depending on the intended use of the property, a DCC may apply to each of the new lots/units created by this development.</p> <p>This letter is for the purpose of providing you with information regarding the services available from the CRD, and should not be construed as either approval or rejection of the proposed rezoning by the CRD.</p>
Ministry of Environment	Few concerns with the proposed rezoning provided subsequent development follows the relevant best management practices. Also, recommendations in any Riparian Areas Regulation reports done for the property should be followed.
SEAPARC	No response.
T'souke Nation	No response.
Archeological Branch	<p>Provincial records indicate there are no known archaeological sites recorded on the property. Our records do indicate there is an area or archaeological potential in the south eastern portion of the property. Areas of archaeological potential indicate there is an increased likelihood for unknown/undocumented archaeological sites to occur at these locations. However, from the perspective of the archaeology branch, the zone of potential is not dense enough to warrant concern at this time. Therefore an archaeological study or permit is not required prior to development at this property.</p> <p>There is always a limited possibility for unknown archaeological sites to exist. Archaeological sites are protected under the Heritage Conservation Act and must not be altered or damaged without a permit from the Archaeology Branch. If any land altering development is planned, owners and operators should be notified that if an archaeological site is encountered during development, activities must be halted and the Archaeology Branch contacted.</p>
ALC	The site is not within the ALR and therefore the Agricultural Land Commission has no comment on the rezoning proposal.
RCMP	No response.
School District #62	No response.
Fortis BC	No conflicts have been identified. Please note that there is a gas main located within the road allowance of Church Road.
Shaw Cable	No response.
Telus	No response.
Building	No comments.
Fire	I have reviewed the rezoning proposal, and while there are likely many fire and life safety concerns to address, I am sure these will be done at the development permit and building permit stages of the application. As such, I have no concerns with this proposal.
Engineering	<p><u>1.0 General</u></p> <ol style="list-style-type: none"> 1. Service the new development in accordance with the District of Sooke Bylaw 404, Subdivision and Development Standards bylaw, 2014, Suburban Area. 2. Road dedication required for the Church Road and Throup Road intersection to accommodate the ultimate intersection at this location. It is recommended in the 2009 Transportation Master Plan that this intersection be a roundabout. Intersection to be designed to the ultimate standard and appropriate land dedication provided prior to subdivision or development.

	<ol style="list-style-type: none">3. Church Road and Throup Road intersection to be designed and constructed to an interim standard to improve vehicular and pedestrian safety.4. Environmental impacts must be mitigated as per the Ministry of Environment's <i>Develop With Care; Environmental Guidelines for Urban and Rural Land Development in British Columbia, 2012</i>. Any breach of an environmental nature must be reported to the Municipal Engineer immediately. <p><u>2.0 Surface Improvements</u></p> <ol style="list-style-type: none">1. As required, applicant to submit an updated TIA to reflect actual proposed development. Costs related to the design and construction of the offsite road improvements as required, and noted in the TIA report are to be borne by the applicant.2. Church Road frontage to be constructed to Connector standard, as per drawing SDD-R11, attached.3. Wadams way frontage to be constructed to Connector standard including the optional works within the existing 25m road right of way, as per drawing SDD-R11, attached. Landscaped medians to be installed where no turning lane is required.4. Install screening fence along the north and west property lines of 2182 Church Road. <p><u>3.0 Sanitary Sewer</u></p> <ol style="list-style-type: none">1. Prior to finalizing the rezoning process, the applicant, at their cost, is to coordinate with the District of Sooke for the completion of a Sanitary Serviceability Review to analyze the capacity of downstream sanitary sewers due to the increased density proposed. The costs relating to upgrading/installing of the downstream system, if required, will be borne by the applicant. (Completed by Applicant – June 19, 2015 - attached) <p><u>4.0 Greenspaces and Environmental</u></p> <ol style="list-style-type: none">1. District of Sooke mapping indicates that a wetland/creek exists within 30m of the property line and the proposed works. Recommendations of RAR #3353 dated November 1, 2014 complete with any revisions must be adhered to. The recommendations of Wilkes letter dated Feb 11, 2015 must also be implemented.2. This development should be considered to provide for the dedication of a neighbourhood park, such as a community garden or dog park.
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NOTES:

1. THIS SECTION IS A TYPICAL MID-BLOCK DESIGN. INTERSECTIONS ARE TO BE DESIGNED INDEPENDENTLY.
2. ALL CONSTRUCTION TO CONFORM TO MMCD SPECIFICATIONS AND DISTRICT OF SOOKE SUPPLEMENTS, AND BYLAWS.
3. TREES AND LIGHTING TO BE STAGGERED ALONG BOTH SIDES OF THE ROAD IN ACCORDANCE WITH ILLUMINATION ENGINEERING STANDARDS.
4. ORNAMENTAL STREET LIGHTS AS PER THE SERVICING REQUIREMENTS.
5. ELEMENTS OF THIS SECTION MAY BE RECONFIGURED ON NEW INSTALLATIONS AS ACCEPTED BY THE MUNICIPAL ENGINEER.

<p>TITLE:</p> <h1>CONNECTOR</h1>	<p>DATE:</p> <p>MAY 2014</p>	<p>DRAWN:</p>	 <p>DWG No. SDD-R11</p>
	<p>SCALE:</p> <p>N.T.S.</p>	<p>APPROVED:</p>	

POLICY CONTEXT

Official Community Plan, 2010 (Bylaw, 400)

The following sections of the OCP are relevant to, and support, the rezoning application:

4.2 SUSTAINABLE LAND USE POLICY

- 4.2.2 (b) Enhance the pedestrian environment through maintenance and improvement of sidewalk infrastructure, as well as trails and connections through Sooke;
- (c) Enhance existing neighbourhoods and promote pedestrian-oriented subdivisions;
- (d) Protect the natural environment, including aquatic ecosystems (lakes, wetlands, rivers, streams), environmentally sensitive areas and rare species.
- (g) Promote a variety of housing including townhouses, rowhouses, apartments, multiple family developments, co-operative housing, co-housing, co-strata structures, secondary and basement suites, small starter homes and duplexes;

4.3 ENERGY AND CLIMATE CHANGE

- 4.3.3 (f) Create contiguous development (avoiding gaps of undeveloped properties);
- (g) Promote mix of land uses in Comprehensive Development areas to allow complementary land uses to exist in the same area.

4.7 HOUSING

- 4.7.1 - Provide a variety of housing options and densities for a diverse population;
- Create a population that supports a range of businesses and cultural activities in the Town Centre;
- 4.7.2 (b) Ensure provision of a range of housing types, tenures and densities, which meet the diverse needs of individuals and families of varying income levels and demographics;
- (c) Provide affordable and attainable housing opportunities;
- 4.7.3 (b) Require that a minimum of 10% of all new multi-family and condominium units are affordable residential housing as defined by the District of Sooke, and implemented through housing agreements, phased development agreements or through the use of density bonusing.
- (f) Require that a minimum of 10% of the total of any proposed bare land or strata single family residential subdivisions are affordable housing lots as defined by the District of Sooke. Affordable single family lots shall be sold at an affordable rate through tools such as covenants and housing agreements;
- (g) Consider allowing developers the flexibility to provide their required affordable housing in different forms thus creating an 'affordable housing mix' in new developments, e.g. secondary suites, condominium rental units, cash, or land in lieu to the District of Sooke towards on/off-site affordable housing;
- (h) Require that, within large residential developments, at least 25% of the total dwelling units proposed should take the form of equivalent multi-family residential units.
- (o) Single family urban density sprawl is not supported;
- (v) Support proposed multi-family and affordable units containing a diversified mix of floor sizes;
- (w) encourage a diversity of housing types and densities through the creation of flexible zones ("flexi-zones") and incentives in the zoning bylaw;

4.9 INFRASTRUCTURE

- 4.9.3 (e) Require all new development to install underground services where feasible;
(l) Protect aquatic ecosystems (lakes, wetlands, rivers, streams) as part of the surface drainage system.

4.12 PARKS AND TRAILS

- 4.12.3 (m) Promote and encourage neighbourhood open space that is conducive to unofficial sports activity and play, specifically encouraging larger neighbourhood parks rather than pockets of smaller parks;
(p) Connect sidewalks to trails and strive for an uninterrupted and integrated pedestrian mobility system.

4.13 TRANSPORTATION

- 4.13.3 (j) Promote Sooke as a pedestrian friendly community in which pedestrian facilities are established and integrated with Planning for transit service;

5.1 COMMUNITY RESIDENTIAL

- 5.1.2 (a) Provide a range of high quality housing types, tenures and densities, which can meet the diverse needs of, and attract, individuals and families of varying income levels and demographics;
(b) Provide affordable and attainable housing opportunities, to meet the needs of various age groups, family types, lifestyles and income groups;
(c) Encourage a variety of housing types, including coach housing, row housing, live/work units and townhouses etc. that diversify the housing stock;
(d) Provide the most efficient use of land and existing physical infrastructure in terms of infill/densification;
(e) Deter new residential subdivision development outside the Community Growth Area (CGA)
(f) Primarily concentrate new residential development in existing areas or neighbourhoods prior to expanding into new areas;
(g) Require safe and formalized pedestrian access to services from all residential areas, including connections to amenities and commercial service areas;
(l) Promote greenspace and boulevard treatments which incorporate rainwater management

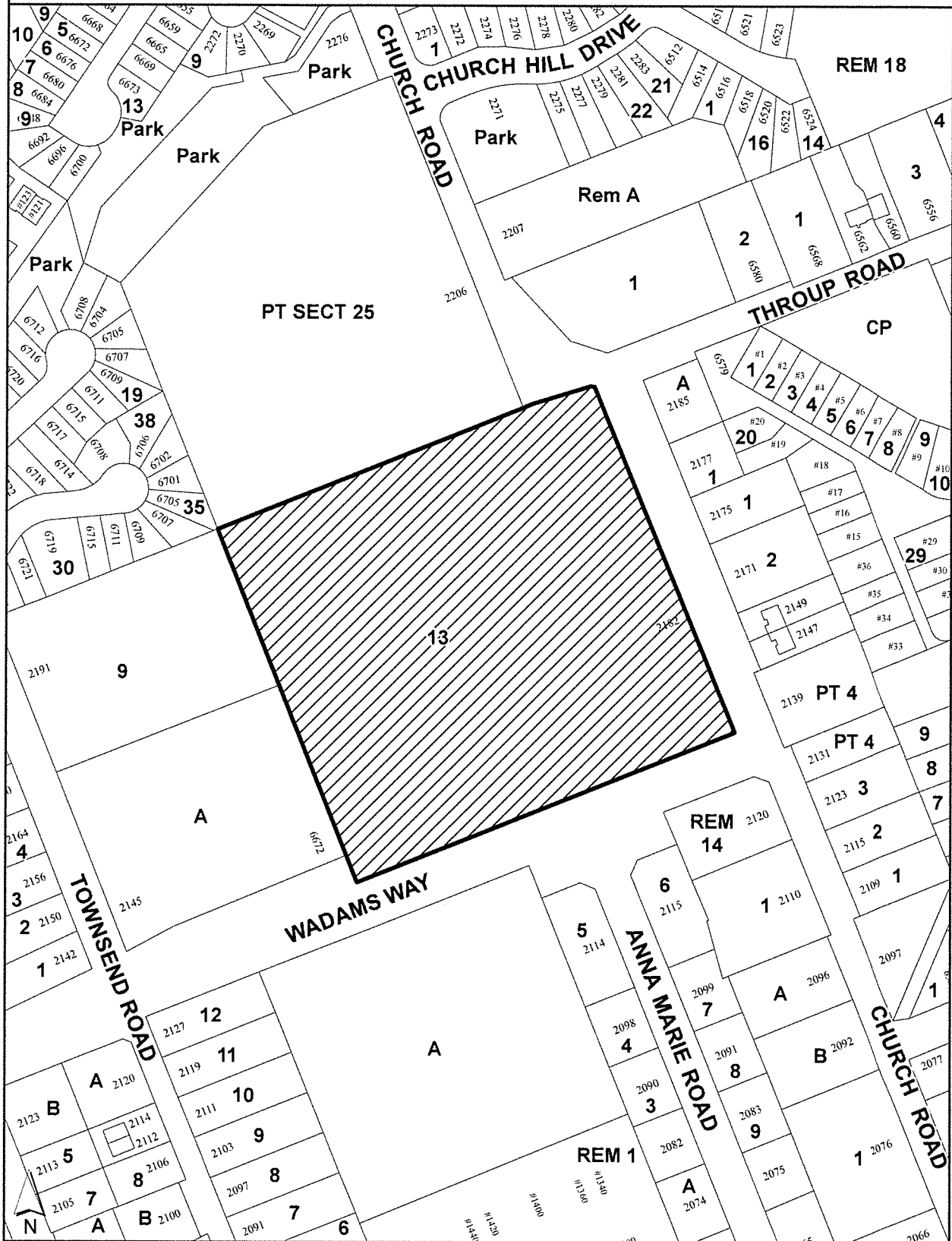
Town Centre Plan, 2009

“Limit further rezoning for commercial use of properties outside the established commercial core” and “limit further rezoning for commercial use of properties adjacent to the established commercial core.” (Pg. 15, Objectives)



SUBJECT PROPERTY MAP

File: PLN01123



 Subject Property


0 25 50 75 Metres



SUBJECT PROPERTY MAP

File: PLN01123



 Subject Property

0 25 50 75
Metres

TERMS OF INSTRUMENT – PART 2

SECTION 219 COVENANT

THIS AGREEMENT, dated for reference _____, 201__ is made

BETWEEN:

Hugh John Wadams
2132 Lincoln Drive S.W.
Calgary AB T3E 5G2

John Restall Cook
6317 Lochside Drive
Saanichton BC V8M 1Y5

Peter Robert Cook
11680 Seahaven Place
Richmond BC V7A 3L9

(the "Owner")

AND:

DISTRICT OF SOOKE, a municipality incorporated under the Local Government Act, R.S.B.C. 1996, c.323 and having its office at 2205 Otter Point Road, Sooke, BC V9Z 1J2

(the "Municipality")

GIVEN THAT:

- A. The Owner is the registered Owner in fee simple of the land in Sooke, British Columbia, legally described as:
Lot 13, Section 10, Sooke District, Plan 1057, Except .036 of an acre thereof conveyed to the crown for road purposes as shown on explanatory plan deposited under No 68404I and except part in plan EPP32377

(the "Land");
- B. The Owner proposes to develop the Land for mixed residential use;
- C. The Owner has requested the Municipality to adopt Bylaw No. 622, *Zoning Amendment Bylaw (600-19)* (the "Rezoning Bylaw") rezoning the Land to permit the development proposed by the Owner, and

- D. The Council of the Municipality has determined that the adoption of the Rezoning Bylaw would, but for the covenants contained in this Agreement, not be in the public interest; and the Owner therefore wishes to grant pursuant to s.219 of the *Land Title Act*, and the Municipality wishes to accept, the covenants over the Land that are set out in this Agreement;

THIS AGREEMENT is evidence that in consideration of payment of \$1.00 by the Municipality to the Owner (the receipt of which is acknowledged by the Owner), the Owner grants to the Municipality in accordance with s.219 of the *Land Title Act* the following covenants:

1. The Owner covenants and agrees with the Municipality that:
 - (a) The Land must not be redeveloped beyond its current use;
 - (b) The Land must not be subdivided;
 - (c) Development of the Land, including by construction or placement of any building or structure on the Land is prohibited with exception of a temporary construction or real estate marketing office or improvements to existing structures;
 - (d) No building permit may be applied for, and the Municipality is not obliged to issue any building permit, in respect of the Land; and
 - (e) No occupancy permit may be applied for, and the Municipality is not obliged to issue any occupancy permit, in respect of the Land,unless the use, subdivision, development, building or occupancy is in accordance with the Schedule of Restrictions attached as Schedule A.
2. Any opinion, decision, act or expression of satisfaction of the Municipality provided for in this Agreement is to be taken or made by the Municipality's Municipal Engineer or his or her delegate authorized as such in writing, in each case acting reasonably.
3. The Owner may, after the Rezoning Bylaw is adopted, request a discharge of any particular covenant granted in this Agreement in respect of any parcel into which the Land may be subdivided, and the Municipality shall execute and deliver a discharge in respect of any such covenant that has been, in the Municipality's opinion, fully satisfied by the Owner.
4. The Municipality shall execute and deliver to the Owners a registrable discharge of the covenants granted in this Agreement in the event that the Rezoning Bylaw is not adopted by July 1, 2016.
5. The Owner releases, and must indemnify and save harmless, the Municipality, its elected and appointed officials and employees, from and against all liability, actions, causes of action, claims, damages, expenses, costs, debts, demands or losses suffered or incurred by the Owner, or anyone else, arising from the granting or existence of this Agreement, from the performance by the Owner of this Agreement, or any default of the Owner under or in respect of this Agreement.

6. The parties agree that this Agreement creates only contractual obligations and obligations arising out of the nature of this document as a covenant under seal. The parties agree that no tort obligations or liabilities of any kind exist between the parties in connection with the performance of, or any default under or in respect of, this Agreement. The intent of this section is to exclude tort liability of any kind and to limit the parties to their rights and remedies under the law of contract and under the law pertaining to covenants under seal.
7. The rights given to the Municipality by this Agreement are permissive only and nothing in this Agreement imposes any legal duty of any kind on the Municipality to anyone, or obliges the Municipality to enforce this Agreement, to perform any act or to incur any expense in respect of this Agreement.
8. Where the Municipality is required or permitted by this Agreement to form an opinion, exercise a discretion, express satisfaction, make a determination or give its consent, the Owner agrees that the Municipality is under no public law duty of fairness or natural justice in that regard and agrees that the Municipality may do any of those things in the same manner as if it were a private party and not a public body.
9. This Agreement does not:
 - (a) affect or limit the discretion, rights or powers of the Municipality under any enactment (as defined in the Interpretation Act, on the reference date of this Agreement) or at common law, including in relation to the use of the Land,
 - (b) affect or limit any enactment related to the use of the Land, or
 - (c) relieve the Owner from complying with any enactment, including in relation to the use of the Land.
10. Every obligation and covenant of the Owner in this Agreement constitutes both a contractual obligation and a covenant granted under s.219 of the Land Title Act in respect of the Land and this Agreement burdens the Land and runs with it and binds the successors in title to the Land. This Agreement burdens and charges all of the Land and any parcel into which it is subdivided by any means and any parcel into which the Land is consolidated. The Owner is only liable for breaches of this Agreement that occur while the Owner is the registered Owner of the Land.
11. The Owner agrees to do everything reasonably necessary, at the Owner's expense, to ensure that this Agreement is registered against title to the Land with priority over all financial charges, liens and encumbrances registered, or the registration of which is pending, at the time of application for registration of this Agreement.
12. An alleged waiver of any breach of this Agreement is effective only if it is an express waiver in writing of the breach in respect of which the waiver is asserted. A waiver of a breach of this Agreement does not operate as a waiver of any other breach of this Agreement.
13. If any part of this Agreement is held to be invalid, illegal or unenforceable by a court having the jurisdiction to do so, that part is to be considered to have been severed

from the rest of this Agreement and the rest of this Agreement remains in force unaffected by that holding or by the severance of that part.

14. This Agreement is the entire agreement between the parties regarding its subject.
15. This Agreement binds the parties to it and their respective successors, heirs, executors and administrators.
16. The Owner must do everything reasonably necessary to give effect to the intent of this Agreement, including execution of further instrument.
17. By executing and delivering this Agreement each of the parties intends to create both a contract and a deed executed and delivered under seal.

As evidence of their agreement to be bound by the terms of this instrument, the parties hereto have executed the Land Title Office Form C that is attached hereto and forms part of this Agreement.

DRAFT

SCHEDULE "A"

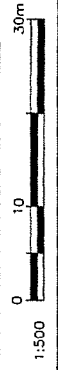
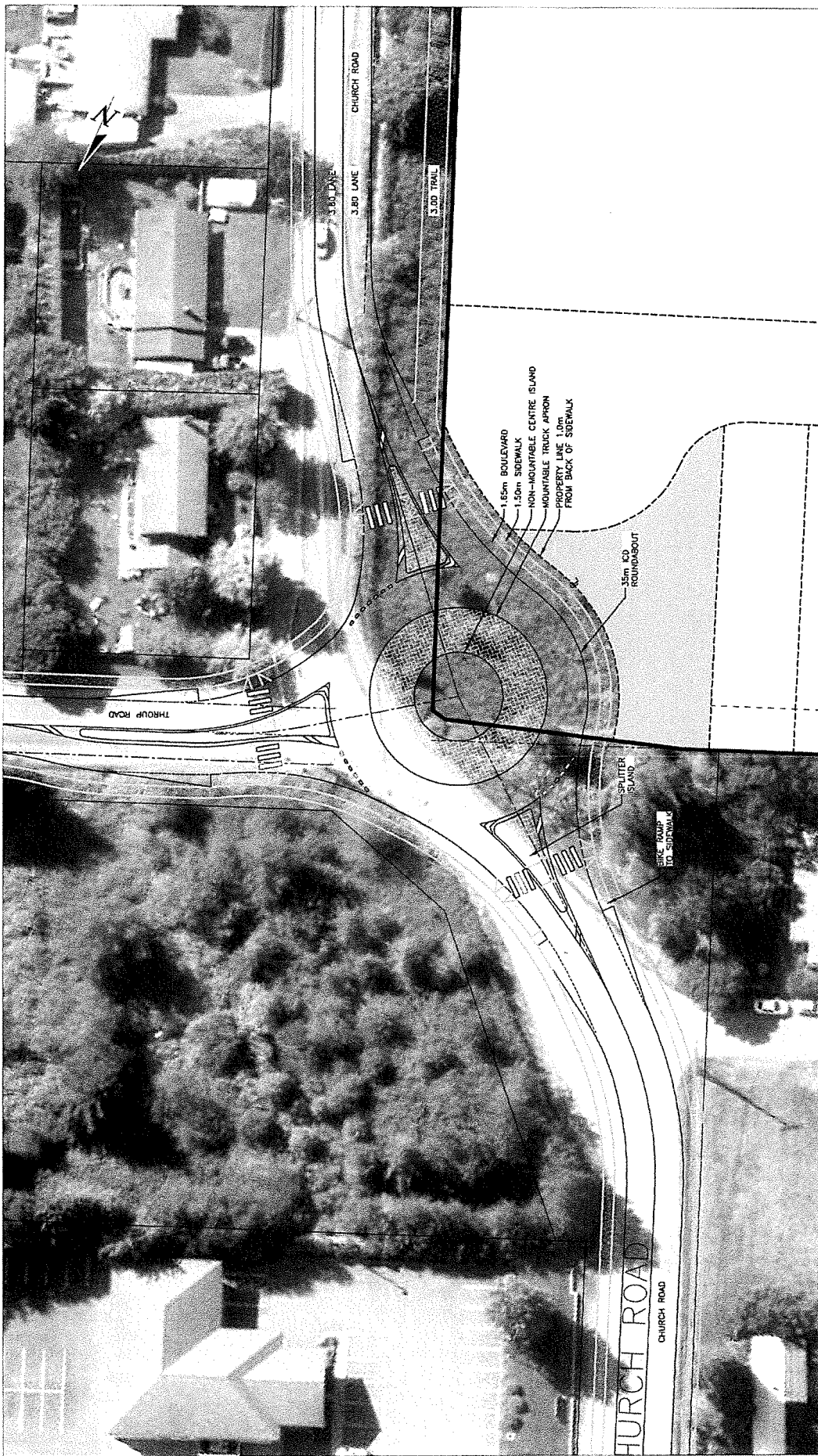
SCHEDULE OF RESTRICTIONS

ROAD IMPROVEMENTS

1. Road dedication required for the future roundabout at Church Road and Throup Road as shown on attached plan McElhanney 14-273 RAB-REV2.
2. Design and construct the Church Road and Throup Road intersection to an interim standard to improve vehicular and pedestrian safety, including road widening, curb and gutter, ditching and regrading, topsoil and seeding, signage and line painting, street lighting and street trees or cash in lieu to a value of \$28,500.
3. Install screening fence along the north and west property lines of 2182 Church Road to the satisfaction of the Municipal Engineer.

<please insert drawing>

END OF DOCUMENT



SCALE:	1:500
DRAWN BY:	IM
DATE:	2015-06-10
DRAWING No.:	14-273 RAB-REV2

CHURCH ROAD / THROUP ROAD
FUTURE ROUNDABOUT LOCATION

THIS DRAWING SHALL NOT BE USED, REPRODUCED, COPIED, OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF MCELHANNONY CONSULTING SERVICES LTD.

McElhannony
 McElhannony Consulting Services Ltd.
 100-1000 BROADVIEW STREET
 VANCOUVER, BC V6X 4E6
 TEL: 604-273-1155

TERMS OF INSTRUMENT – PART 2

SECTION 219 COVENANT

THIS AGREEMENT, dated for reference _____, 2015 is made

BETWEEN:

Hugh John Wadams
2132 Lincoln Drive S.W.
Calgary AB T3E 5G2

John Restall Cook
6317 Lochside Drive
Saanichton BC V8M 1Y5

Peter Robert Cook
11680 Seahaven Place
Richmond BC V7A 3L9

(the "Covenantor")

AND:

DISTRICT OF SOOKE, a municipality incorporated under the Local Government Act, R.S.B.C. 1996, c.323 and having its office at 2205 Otter Point Road, Sooke, BC V9Z 1J2

(the "Municipality")

GIVEN THAT:

- A. The Covenantor is the registered Owner in fee simple of the land in Sooke, British Columbia, legally described as:
(PID 029-171-695) Lot 13, Section 10, Sooke District, Plan 1057, Except .036 of an acre thereof conveyed to the crown for road purposes as shown on explanatory plan deposited under No 68404I and except part in plan EPP32377
(the "Land");
- B. Section 219 of the *Land Title Act* provides, inter alia, that a covenant, whether of a negative or positive nature, may be registered as a charge against the title, in favour of the Municipality or the Crown, and that the covenant is enforceable against the Covenantor and the successors in title of the Covenantor.
- C. A covenant under Section 219 of the *Land Title Act* may include provisions in respect of the use of land, the use of a building on or to be erected on lands; that land is to be built on in accordance with the covenant, is not to be built on except in accordance with that covenant or is not to be built on; that land is not to be subdivided unless in accordance with the covenant or is not to be subdivided.

- D. The Covenantor agrees that the Land is to not to be built on or subdivided except in accordance with the provisions in respect of use of land and the terms and conditions herein provided for in this covenant.

NOW THEREFORE THIS AGREEMENT WITNESSETH THAT pursuant to Section 219 of the *Land Title Act* and in consideration of the premises, the mutual covenants and agreements contained herein and other good and valuable consideration and the sum of One Dollar (\$1.00) now paid by the Municipality to the Covenantor (the receipt and sufficiency whereof is hereby acknowledged), the parties hereto covenant and agree that the Lands shall not be built on or subdivided except in accordance with this Covenant as follows:

1. THE COVENANTOR COVENANTS AND AGREES with the Municipality that
 - a) The Owner shall designate and construct a minimum of 10% of the dwelling units approved by the zone as Affordable Housing Units. Affordable Housing means:
 - i) in the case of rental housing, that which is available for rent at or below the average rent for "Victoria", as determined annually by the Canada Mortgage and Housing Corporation's "Rental Market Report", and
 - ii) In the case of owner-occupied housing, that which is available for purchase at or below an amount calculated as 30% of the amount which is median income level for all two or more person households from the most recent national census by Statistics Canada, updated annually using the British Columbia Consumer Price Index.
 - b) The affordable housing units shall be a similar size and quality as other dwelling units on the Land and shall be of a design determined by the Owner, subject to the zoning regulations and development permit guidelines of the municipality.
 - c) Each time Affordable Housing units are provided as part of the development, the Owner will enter into a section 905 Housing Agreement and Section 219 Covenant prior to development permit approval or Subdivision approval, whichever comes first.
 - d) The Owner and the Municipality agree that no affordable housing units need to be designated in respect of the first nine (9) dwelling units proposed on the Land.
 - e) Notwithstanding 1(a)(b)(c) of this agreement, the Owner may provide cash in lieu of the affordable housing unit at \$10,000 per unit to a maximum of \$130,000 towards the Housing Reserve Fund, Bylaw No. 259.
2. IT IS MUTUALLY UNDERSTOOD, agreed and declared by and between the parties hereto that:
 - a) nothing contained or implied herein shall in any way restrict or abrogate and shall not be deemed to restrict or abrogate, the rights and powers of the Municipality in the exercise of its functions under any public and private statutes, by-laws, orders and regulations, in its absolute discretion, and in accordance with its lawful powers and duties;
 - b) the burden of the covenants herein provided for shall run with the Lands and will be personal and binding upon the Covenantor during the Covenantor's seisen of or ownership of any interest in the Lands;

- c) notwithstanding anything to the contrary, the Covenantor shall not be liable under any breach of any covenants and agreements contained herein occurring after the Covenantor ceases to have any further interest in the Lands:
- d) the Covenantor will deliver, after execution hereof, this Agreement to the Municipality in a form acceptable as a Section 219 Covenant and concurrently such instruments of priority as may be necessary to give this Agreement priority over all financial charges and encumbrances which may have been registered against the title to the Lands at the time of submitting this Agreement for registration in the applicable Land Title Office, save and except those specifically approved in writing by the Municipality or in favour of the Municipality;
- e) the fee simple estate in and to the Lands will not pass or vest in the Municipality under or by virtue of these presents and the Covenantor may fully use and enjoy the Lands except only for the requirements provided for in this Agreement;
- f) the Covenantor and its successors and assigns shall at all times indemnify and save harmless the Municipality from and against all claims, demands, actions, suits, loss, costs, fines, penalties, charges, damages and expenses including legal fees and litigation expenses whatsoever which the Municipality may incur, suffer or be put to arising out of or in connection with any breach of any covenant or agreement on the part of the Covenantor contained in this Agreement;
- g) the covenants and agreements on the part of the Covenantor and herein provided for have been made by the Covenantor as contractual obligations as well as having been made pursuant to Section 219 and as such will be binding on the Covenantor;
- h) nothing herein provided for shall be deemed to constitute waivers of any lawful requirements within which the Covenantor would otherwise be obligated to comply with;
- i) no amendment of, addition to, or discharge of this Agreement shall be binding upon the parties hereto unless it is in writing and executed by the parties hereto;
- j) if any provision provided for in this Agreement is for any reason held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability will not affect any other provisions of this Agreement which shall be construed as if such invalid, illegal, or unenforceable provisions had never been contained therein and such other provisions shall be enforceable to the fullest extent permitted by law;
- k) the Municipality, in addition to its rights under this Agreement or at law, will be entitled to all equitable remedies, including specific performance, injunction and/or declaratory relief, to enforce its rights under this Agreement;
- l) the Covenantor shall pay for the preparation and registration, if applicable, of this Agreement together with any concurrent instruments of priority as herein provided for and any amendment, addition or discharge thereof;
- m) wherever the singular, masculine, or neuter is used herein, the same shall be construed as meaning the plural, feminine or the body corporate or politic according to the context in which it is used;

- n) the parties hereto shall do and cause to be done all things and execute and cause to be executed all documents which may be necessary to give proper effect to the intention of this Agreement; and
- o) this Agreement shall enure to the benefit of and be binding upon the Covenantor, the Municipality and their respective successors and assigns.
- p) The Municipality shall execute and deliver to the Owners a registrable discharge of the covenants granted in this Agreement in the event that Bylaw No 622, *Zoning Amendment Bylaw (600-19)* is not adopted by July 1, 2016.

IN WITNESS WHEREOF the parties hereby acknowledges that this Agreement has been duly executed and delivered by executing the Form C and D attached hereto.

END OF DOCUMENT



DISTRICT OF SOOKE

BYLAW No. 622

A bylaw to amend Bylaw No. 600 *Sooke Zoning Bylaw, 2013* for the purpose of creating the Wadams Way Comprehensive Development Zone (CD14) and to amend the zoning of properties located at 2182 Church Road from Large Lot Residential (R1) to Wadams Way Comprehensive Development Zone (CD14).

The Council of the District of Sooke, in open meeting assembled, enacts as follows:

1. This bylaw is cited as *Zoning Amendment Bylaw (600-19)*.
2. Bylaw No. 600, *Sooke Zoning Bylaw, 2013* is amended by adding immediately following Schedule 813 in **Part 5 – Zones** the following as Schedule 814 - *Wadams Way Comprehensive Development Zone (CD14)*:

“Schedule 814 – Wadams Way (CD14)

Wadams Way CD Zone

CD14

814.1 Purpose: This zone provides for a variety of residential uses that will include single and multiple family residential housing units with varying lot sizes.

814.2 Permitted Uses:

General Uses:

Gravel extraction for on-site development and on-site and off-site municipal services directly attributable to the on-site development shall be permitted.

**Principal Uses Area A:
Single Family Residential**

- a) Horticulture
- b) One single family dwelling or one duplex per lot*
- c) One temporary construction and real estate marketing office in Area A

**Principal Uses Area B:
Single Family/Multi Family Residential**

- a) Apartment building*
- b) Assisted living facility*
- c) Cluster dwelling units*
- d) Horticulture
- e) Townhouse*
- f) One single family dwelling or one duplex per lot*
- g) One temporary construction and real estate marketing office in Area B

**Principal Uses Area C:
Multi Family Residential**

- a) Apartment building*
- b) Assisted living facility*
- c) Cluster dwelling units*
- d) Townhouse*

* See conditions of use

Principal Uses Area D:

- a) Park
- b) Institutional accessory to a park use
- c) Assembly
- d) Playground

Accessory Uses:

On a lot with Apartments, Cluster dwelling units, Townhouses:

- a) Limited home-based business

On a lot with one single family dwelling or one duplex:

- a) Bed and breakfast*
- b) Boarding and lodging
- c) Home-based business
- e) Vacation accommodation unit

On a lot with one single family dwelling:

- a) One secondary suite

814.3 Conditions of Use for Area A:

- a) Single family dwelling permitted on lots 11 m or more in width;
- b) Bed and breakfast permitted on lots 600 m² or larger;
- c) Duplex permitted on lots 600 m² or larger in area and 11 m or more in width;

814.4 Conditions of Use for Area B:

- a) Single family dwelling permitted on lots 11 m or more in width;
- b) Bed and breakfast permitted on lots 600 m² or larger in a single family dwelling or duplex;
- c) Duplex permitted on lots 600 m² or larger in area and 11 m or more in width;
- d) Apartment building, assisted living facility, cluster dwellings and townhouses are permitted on lots 1000m² or larger in area and 30 m or more in width;

- e) Single family dwellings and duplexes are not permitted on a lot containing an apartment, assisted living facility, cluster dwelling units or townhouses.

814.5 Conditions of Use for Area C:

- a) Apartment building, assisted living facility, cluster dwellings and townhouses are permitted on lots 1000m² or larger in area and 30 m or more in width;

814.6 Subdivision Regulations:

- a) Minimum lot area for Areas A and B - 350 m²
- b) Minimum lot area for Area C – 1,000 m²
- c) Panhandle lots are not permitted

814.7 Maximum Dwelling Unit Density: The number of dwelling units of all types in Areas A, B and C shall not exceed 133, and for this purpose a bed-sitting room in an assisted living facility constitutes a dwelling unit, but a secondary suite does not constitute a dwelling unit.

814.8 Maximum Height:

- a) Single family dwelling or Duplex - 10.5 m
- b) Apartment, assisted living facility, cluster dwelling units or townhouses – 20m
- c) Accessory buildings – 4 m

814.9 Maximum Lot Coverage: 45%

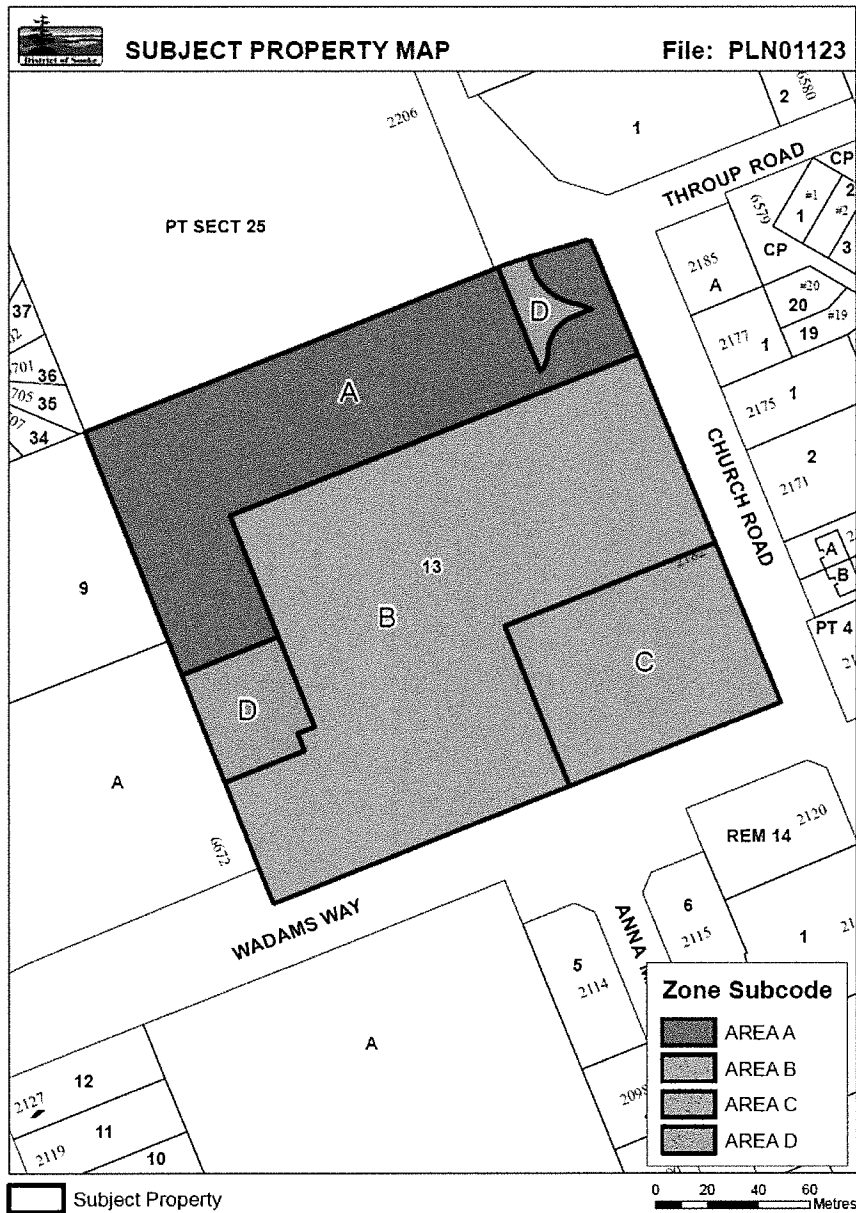
814.10 Minimum Setbacks:

Use	Front Lot Line	Flanking Lot Line	Side Lot Line	Rear Lot Line	Lane Lot Line
Single family or Duplex	4.5 m – dwelling portion 6 m – garage/ carport portion	2 m	1.2 m	3.5 m	1 m
Apartment, Assisted Living Facility, Cluster dwelling units, Townhouse	3 m	3 m	3 m	4.5 m	1 m
Accessory Building or Structure	7.5 m	4.5 m	1.2 m	4.5 m	0 m

814.11 Minimum Amenity Area for Areas B and C: 8%, for lots containing

apartments, assisted living facility, cluster dwelling units or townhouses.

814.12 Subject Property Map: The official map for this CD Zone is kept by the Corporate Officer, and forms part of this bylaw. The Subject Property Map is provided for information purposes only.



3. Bylaw No. 600, *Sooke Zoning Bylaw, 2013* is further amended in **Schedule A**

– **Zoning Map** by changing the zoning from *Large Lot Residential (R1)* to *Wadams Way Comprehensive Development Zone (CD14)* on the property shown hatched and outlined in black on Schedule A to this bylaw and legally described as:

Lot 13, Section 10, Sooke District, Plan 1057, Except .036 of an acre thereof conveyed to the crown for road purposes as shown on explanatory plan deposited under No 684041 and except part in Plan EPP32377

4. Bylaw No. 600, *Sooke Zoning Bylaw, 2013* is further amended in the table in section 5.1, "Zones" of **Part 5 – Zones** by adding the following in the "Comprehensive Development & Mixed Use (CD) Zones" section:

Wadams Way	CD14	814
------------	------	-----

5. If any portion of this bylaw is set aside by a Court of competent jurisdiction, the portion is severed and the valid remainder shall remain in force and effect.

Introduced and read a first time the day of 2015.

Read a second time the day of , 2015.

Public Hearing held the day of , 2015.

Read a third time the day of 2015.

Approved by the Ministry of Transportation and Infrastructure the day of , 2015.

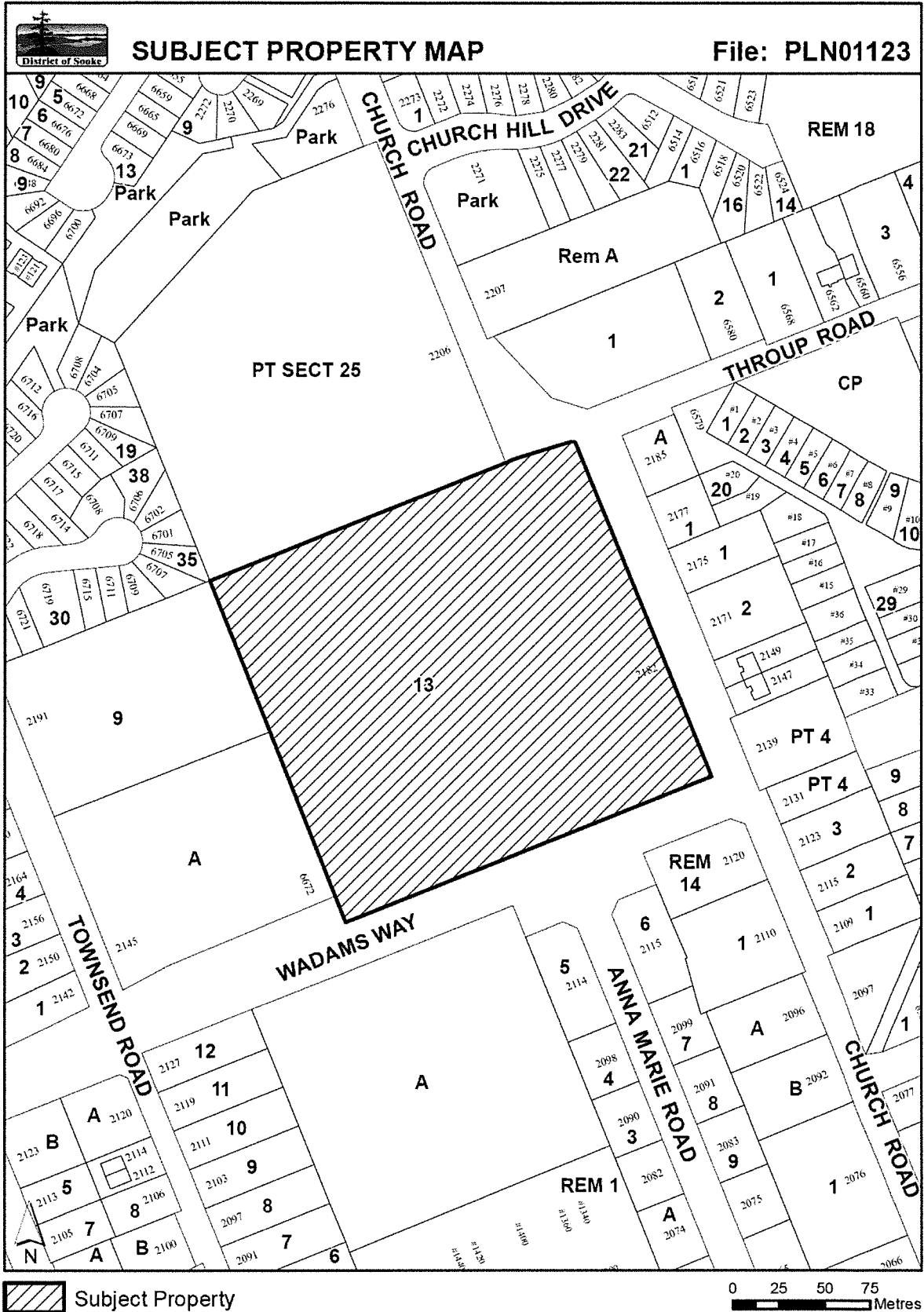
Adopted on the day of , 2015.

 Maja Tait
 Mayor

 Bonnie Sprinkling
 Corporate Officer

FOR INFORMATION ONLY: Section 219 Covenants registered in the Victoria Land Titles office under numbers **

SCHEDULE A



2182 Church Road Development Traffic Impact Assessment

Prepared for: McElhanney Consulting Service Ltd.

January 12, 2015

Prepared by: Boulevard Transportation, a division of Watt Consulting Group

Primary Contact: Nadine King, P.Eng., PTOE, Transportation Engineer

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2182 CHURCH ROAD DEVELOPMENT

Traffic Impact Assessment

Prepared for: **McElhanney Consulting Service Ltd.**

Prepared by: **Boulevard Transportation, a division of Watt Consulting Group**

Our File: **1780**

Date: **January 22, 2015**

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1.0 INTRODUCTION

Boulevard Transportation a division of Watt Consulting Group was retained by *McElhanney Consulting Service Ltd.* to conduct a traffic impact assessment (TIA) for a proposed residential development at Church Road / Wadams Way in Sooke, BC. This report reviews existing traffic conditions and post development traffic conditions for both the short and long term horizon. The report also reviews the site accesses and other modes of transportation for the site.

1.1 Study Area

The study area for this project includes the site accesses and the following intersections:

- Sooke Road / Church Road;
- Church Road / Wadams Way;
- Wadams Way / Anna Marie Road

The intersection of Sooke Road / Church Road is signalized while the other two intersections (Church Road / Wadams Way and Wadams Way / Anna Marie Road) within the study area are stop controlled. **Figure 1** shows the study area and site location.

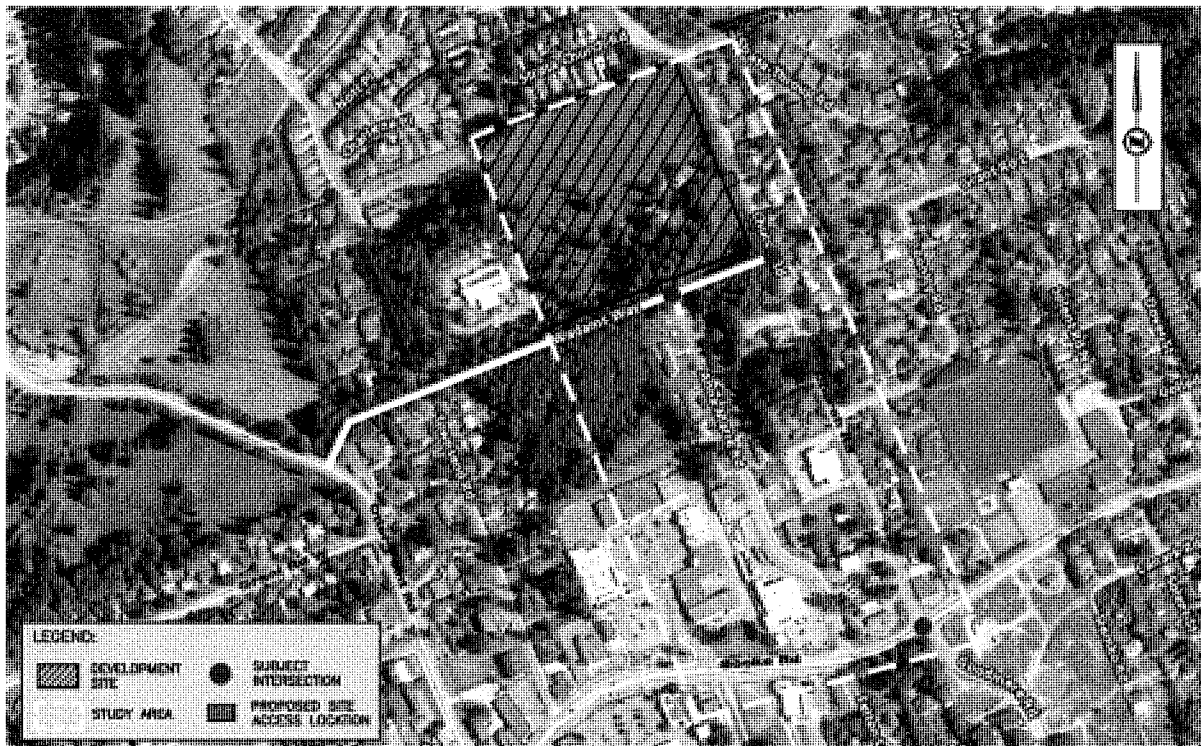


Figure 1 – Study Area and Site Location

2.0 EXISTING CONDITIONS

2.1 Road Network

Sooke Road (Highway 14) is an undivided two lane rural arterial road under the jurisdiction of the Ministry of Transportation and Infrastructure (MoTI). Church Road is a collector road under the jurisdiction of the District of Sooke. Wadams Way is a recently constructed collector road providing a connection between Otter Point Road and Church Road. A 3m wide multi-use trail (asphalt paved) has been constructed for pedestrians and cyclists along Wadams Way (south side) and Church Road (west side).

The intersection of Sooke Road/Church Road is signalized. The intersection will be four-legged with signal upgrade within the next several months as the Mariners Village (south area of the intersection) development is currently being constructed. The intersection currently is a right-out only for the northbound movement while entering Goodmere Road from existing legs is allowed. With the intersection upgrade, the intersection laning will be a left turn lane and a shared through / right lane for each leg. The signal will have protected / permitted phases for the eastbound / westbound movements while have permitted phases only for the southbound / northbound movements.

2.2 Land Use

The existing land use for the development site is single dwelling residential (R1). There is an existing house on the site. The land use around the proposed site is residential and community facility (P2).

2.3 Traffic Analysis

2.3.1 Traffic Volumes

Traffic counts were collected for the PM peak hour. Traffic counts for Sooke Road / Church Road and Church Road / Wadams Way were conducted from 4:00 to 5:00 PM on December 3, 2014.

2.3.2 Traffic Modelling – Background Information

Analysis of the traffic conditions at the intersections within the study area were undertaken using Synchro software. The Synchro results were also reviewed using the microsimulation portion of the software (SimTraffic).

Synchro / SimTraffic is a two-part traffic modelling software that provides analysis of traffic conditions based on traffic control, geometry, volumes and traffic operations. Synchro software (Synchro 8) is used because of its ability to provide analysis using the Highway Capacity Manual (2010) methodology, while SimTraffic integrates established driver behaviours and characteristics to simulate actual conditions by randomly “seeding” or positioning vehicles travelling throughout the network. Synchro uses measures of effectiveness to return the results of the analysis. These measures of effectiveness include level of service (LOS), delay and 95th percentile queue length. The delays and type of traffic control are used to determine the level of service. The level of

services are broken down into six letter grades with LOS A being excellent operations and LOS F being unstable/failure operations. Level of service C is generally considered to be an acceptable LOS by most municipalities. Level of service D is generally considered to be on the threshold between acceptable and unacceptable operations.

2.4 Traffic Analysis Results

The existing traffic volumes and lane geometrics were entered into Synchro to determine the existing traffic conditions during the PM peak hour. At the signalized Sooke Road / Church Road intersection, all movements are operating at acceptable levels of service (LOS C or better) except the westbound through / right movement (LOS E) during the PM peak hour. The other two stop-controlled intersections within the study area are currently operating at good levels of service (LOS A/B) for all movements. **Figure 2** shows 2014 existing volumes and LOS.

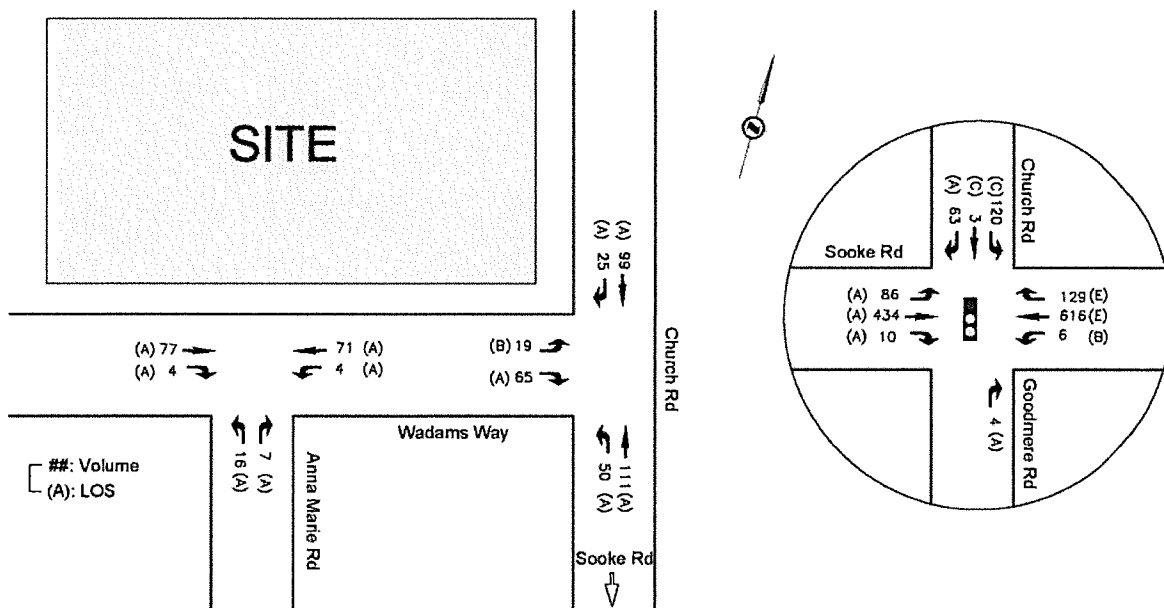


Figure 2 – 2014 Existing Traffic Volumes and Levels of Service

3.0 POST DEVELOPMENT

3.1 Site Access

There are two accesses proposed for the development site. One access (east frontage of the site) is proposed on Church Road and the other access (south frontage of the site) is proposed on Wadams Way. **Figure 3** shows the proposed site plan and accesses.

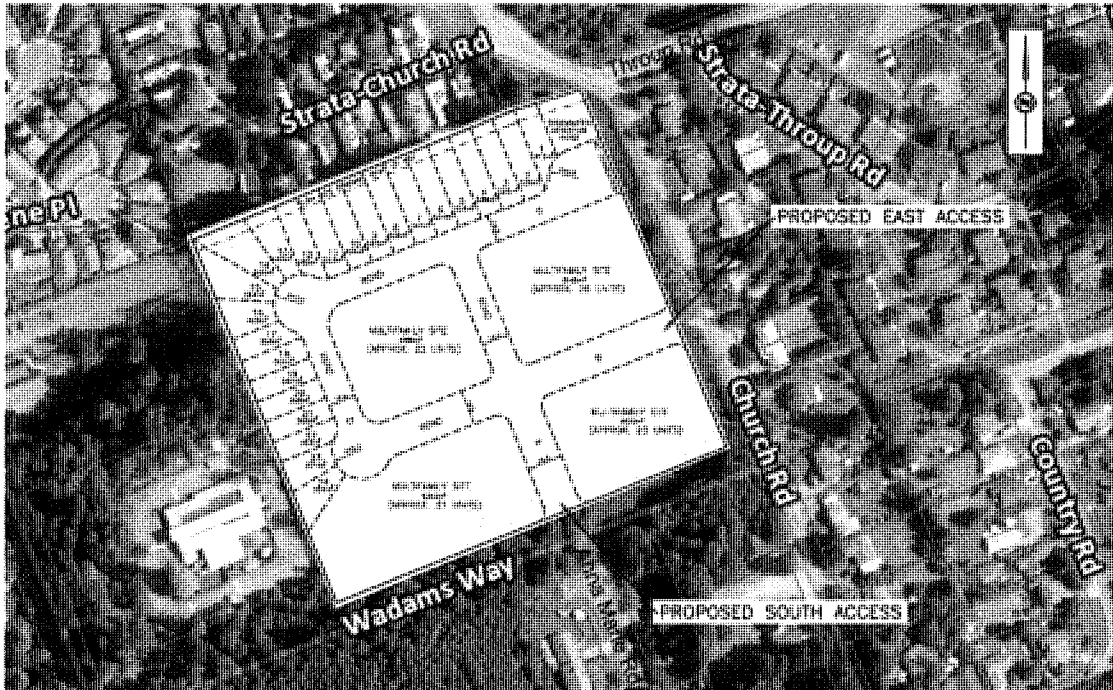


Figure 3 – Site Plan and Accesses

3.2 Trip Generation

The proposed site is a residential development that is a mix of single and multi-family units that may vary. Traffic impacts were reviewed for 24 single-family lots and 102 multi-family units which is expected to be the highest traffic generating density for the site. There is an option that the 24 single family lots could be 18 duplex lots (36 units); however, this option generates less traffic than the 24 single family lot option. The development scenario trips were generated using the ITE Trip Generation Manual 9th Edition. The development will generate 77 trips during the PM peak hour. The PM peak hour site trips are summarized in

Table 1.

TABLE 1 – TRIP GENERATION FOR PM PEAK HOUR

Code	Description	Units	Trip Rate	Total Trips	Trips In	Trips Out
210	Single Family Lots	24	1.00/lot	24	15	9
230	Multi-Family Units	102	0.52/unit	53	36	17
	Total	126	-	77	51	26

3.3 Trip Assignment

The development trips were assigned to the key intersections and site accesses based on the distribution of existing trips and commercial area locations. It is expected that a low percentage of the trips generated from the proposed development will be from/to Church Road north.

The new trips entering and exiting the site were assigned the following percentages:

- 50% of all trips are from/to Church Road South - Sooke Road East
- 25% of all trips are from/to Church Road South - Sooke Road West
- 5% of all trips are to/from Church Road North
- 15% of all trips are from/to Wadams Way West
- 5% of all trips are from/to Anna Marie Road

It is assumed that the site trips from / to Church Road South use the two accesses half and half in entering and exiting **Figure 4** shows site trips assigned to the existing roadway network and site accesses.

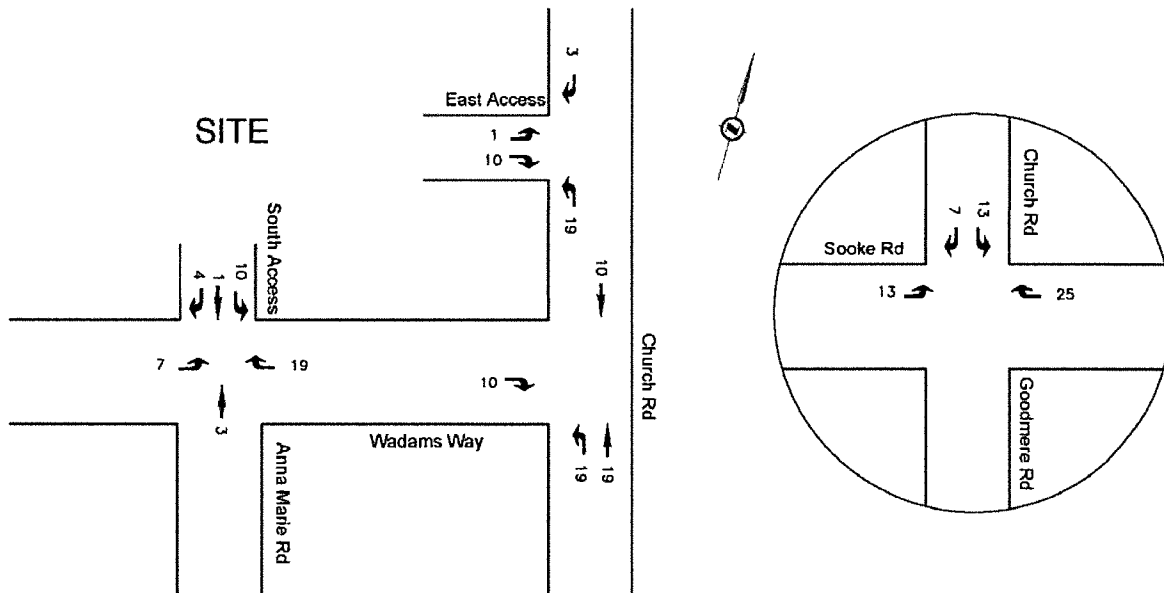


Figure 4 – Site Trip Assignment

3.4 Traffic Analysis

3.4.1 Post Development PM Peak Hour Conditions

The weekday PM peak hour post development traffic volumes were entered into Synchro to determine the post development traffic conditions at the key intersections and the site accesses. For the signalized intersection of Sooke Road / Church Road, the new Goodmere traffic (south leg) was added with signal timing adjustments and new lane configurations.

The development will have little impact on the existing intersections adjacent to the site. At the signalized intersection of Sooke Road / Church Road, the eastbound / westbound through movements on Sooke Road will continue to operate at the same levels of service. The additional delay is 8.6 seconds for the westbound movement (through / right: LOS E) with the development and Goodmere traffic added and 3.0 seconds for the eastbound through / right movement. No queuing issues were found for all left turn lanes at the intersection.

At the stop controlled intersections and site accesses on Church Road and Wadams Way, all movements continue to operate at good levels of service (LOS A / B). **Table 2** summarizes 2014 PM peak hour traffic conditions with / without the development. **Figure 5** shows 2014 post development volumes and LOS.

TABLE 2 – 2014 PM PEAK HOUR CONDITIONS COMPARISON

Intersection	Movement	Existing			Post Development		
		Synchro		Simulation	Synchro		Simulation
		LOS	Delay (s)	95% Queue (m)	LOS	Delay (s)	95% Queue (m)
Sooke Rd/Church Rd	EBL	A	6.2	18.7	B	12.0	27.9
	EB T/R	A	6.7	33.6	A	9.7	48.5
	WBL	B	12.8	12.8	A	5.3	14.6
	WBT/R	E	60.5	182.1	E	69.1	267.0
	SBL	C	25.7	27.3	C	24.6	24.8
	SB T/R	C	25.7	23.1	B	13.3	39.2
	NBL	-	-	-	D	38.2	12.4
	NB T/R	-	-	-	B	13.7	8.6
	NBR*	A	0	0	-	-	-
Church Rd/ Wadams Way	EBL	B	11.1	11.7	B	11.3	11.2
	EBR	A	9.3	13.8	A	9.4	13.8
	NB L/T	A	7.6	7.3	A	7.7	12.7
	SB T/R	A	0	0	A	0	1.3
Wadams Way/ Anna Marie Rd/ Site Access (south)	EB L/T/R	A	0	0	A	7.4	3.5
	WBL	A	7.4	1.3	A	7.4	1.3
	WB T/R	A	0	0	A	0	0
	SB L/T/R	-	-	-	A	9.9	10.8
	NB L/T/R	A	9.4	12.3	A	9.9	12.8

Church Rd/ Site Access (east)	EBL/R	-	-	-	A	9.3	9.3
	NB L/T	-	-	-	A	7.5	4.7
	SB T/R	-	-	-	A	0	0

*Currently right only (no left and through) for the northbound movement

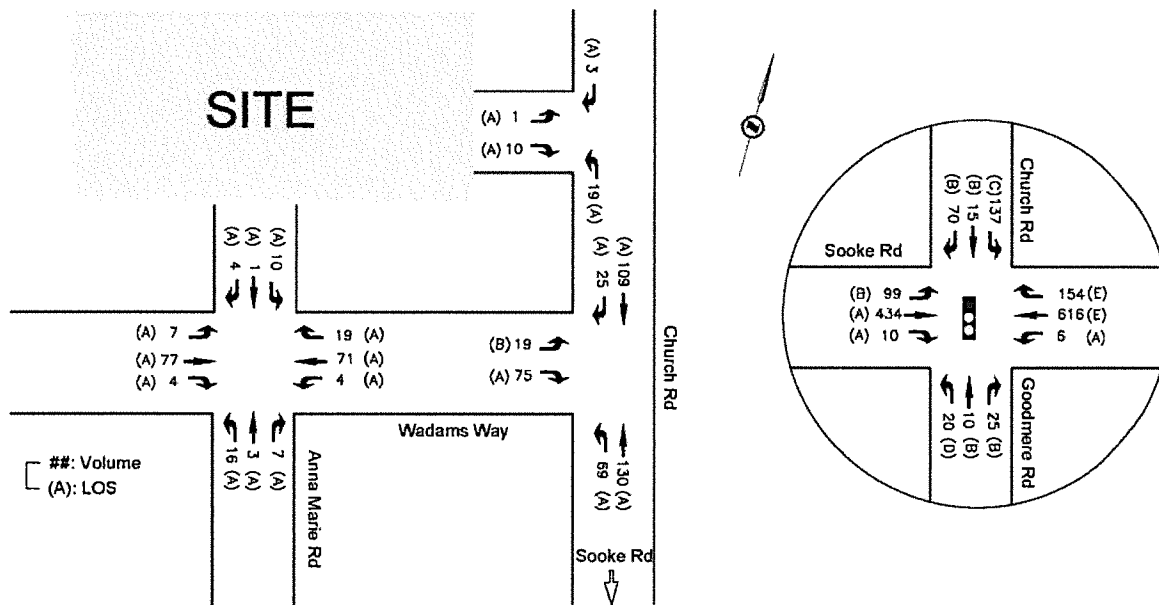


Figure 5 – 2014 Post Development Volumes and Levels of Service

3.4.2 Long Term Conditions – 10 Year Horizon

The District of Sooke plans to continue to implement the Connector Road project (ie. connection from Phillips to Church Road) in the future. With the Connector, Sooke Road traffic is expected to be further alleviated from Otter Point Road to Phillips Road. However, the long term conditions were analyzed under existing roadway network (no connection between Throup and Phillips).

Annual growth rate of PM peak hour volumes on Sooke Road was estimated at 1.9% between 2005 and 2012 based on MoTI's short counts at Dover Street. Therefore, the 2014 existing traffic volumes were projected with a 2% annual growth rate to obtain the 2024 background traffic volumes. Traffic volumes for the Mariners Village site was added for the proposed Phase 1 and 2 of the Mariners Village development. The long term conditions were analyzed in Synchro software.

Table 3 summarizes 2024 (10 year horizon) PM peak hour traffic conditions with / without the development. Figure 6 shows 2024 post development volumes and LOS.

In the long term (2024), at the signalized intersection of Sooke Road / Church Road, the westbound through movements on Sooke Road will drop to a failing level of service with / without the development. The resulting LOS F is due to the projected background volumes, not the development traffic. All other movements will operate at a LOS C or better except the southbound left movement (LOS D) with / without the development.

At the stop controlled intersections and the site accesses, all movements will continue to operate at good levels of service (LOS A / B) in the long term with / without the development.

TABLE 3 – 2024 PM PEAK HOUR CONDITIONS COMPARISON

Intersection	Movement	2024 Background			2024 Post Development		
		Synchro	Simulation	95% Queue	Synchro	Simulation	95% Queue
		LOS	Delay (s)	(m)	LOS	Delay (s)	(m)
Sooke Rd/Church Rd	EBL	B	13.3	33.5	B	15.1	35.3
	EB T/R	B	15.1	68.1	B	15.4	68.6
	WBL	A	5.6	20.0	A	5.7	24.0
	WBT/R	F	150.8	255.5	F	157.1	258.5
	SBL	D	39.8	25.2	D	41.8	26.0
	SB T/R	B	15.4	47.6	B	16.4	48.8
	NBL	C	27.0	19.2	C	27.2	18.9
	NB T/R	B	12.2	21.6	B	12.2	20.8
Church Rd/ Wadams Way	EBL	B	11.4	13.0	B	11.9	12.4
	EBR	A	9.5	13.4	A	9.7	14.1
	NB L/T	A	7.7	10.9	A	7.8	13.0
	SB T/R	A	0	1.3	A	0	0.9
Wadams Way/ Anna Marie Rd/ Site Access (South)	EB L/T/R	A	0	0	A	7.5	3.0
	WBL	A	7.4	1.8	A	7.4	2.3
	WB T/R	A	0	0	A	0	0
	SB L/T/R	-	-	-	B	10.1	11.0
	NB L/T/R	A	9.6	12.7	B	10.1	13.9
Church Rd/ Site Access (East)	EB L/R	-	-	-	A	9.6	9.8
	NB L/T	-	-	-	A	7.6	4.3
	SB T/R	-	-	-	A	0	0

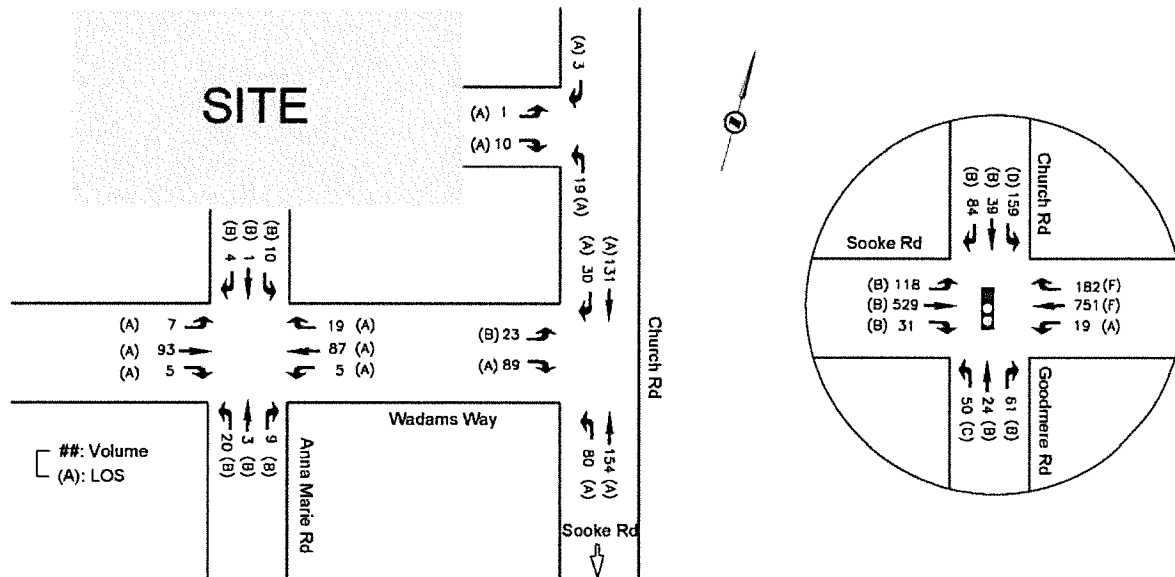


Figure 6 – 2024 Post Development Volumes and Levels of Service

4.0 SAFETY AND GEOMETRICS

4.1 Intersection Spacing

The proposed site access on Church Road is located 70m north of the intersection (Wadams Way). According to the TAC's design guidelines, the suggested minimum corner clearance to accesses is 25m for stop controlled driveways on collector roads. The proposed 70m spacing exceeds the TAC's guidelines. A review of queues at Church Road / Wadams Way and the site access found there is no interaction between the two intersections.

4.2 Sight Distances

Sight distances were measured at the proposed driveway locations in-field on Church Road and Wadams Way. Turning sight distance was reviewed for the locations based on TAC's Geometric Design Guidelines. There are two design guidelines for turning sight distances: (1) upper boundary and (2) lower boundary. The upper boundary is based on a theoretical application of the gap acceptance methodology, which provides more conservative values of sight distance. The upper boundary application maintains 85% of the design speed and a gap of at least 2.0 seconds between vehicles. The lower boundary is based on empirical gap acceptance methodology which uses reduced speed to 70% of initial speed for vehicles travelling on the major road. As an absolute minimum, stopping sight distance (SSD) must be met, which is 65m at 50 km/h (posted speed limit). In **Table 4**, required turning sight distances are indicated for each boundary. For example, the required turning sight distance looking right for left turns is 104m for the lower boundary and 123m for the upper boundary.

At the proposed access location on Wadams Way, all measured sight distances exceed the required turning sight distances for the upper boundary. Therefore, the proposed site access (Wadams Way) is properly located from a sight distance perspective. **Table 4** is a summary of sight distances at the proposed access on Wadams Way.

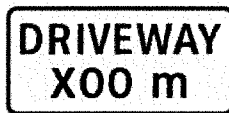
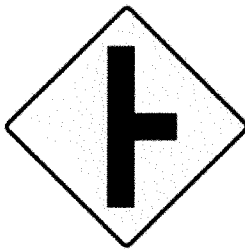
TABLE 4 – SIGHT DISTANCES AT SITE ACCESS ON WADAMS WAY FOR 50 KM/H

Movement	Direction	Required Sight Distance	At Wadams Way Access	Sight Distance Met?
Left Turn	Looking Left	98m	140m	Yes
	Looking Right	104m (lower boundary) 123m (upper boundary)	130m	Yes Yes
Right Turn	Looking Left	90m (lower boundary) 123m (upper boundary)	130m	Yes Yes
		Through on Major Road		Looking Forward

At the proposed access location on Church Road, sight distance looking to left (north) is restricted due to vertical curvature of the road while the measured sight distance (150m) looking to right (south) exceeds the all sight distance requirements including turning sight distances for the upper boundary. The measured sight distance to the north is 82m and this exceeds the TAC's recommended minimum stopping sight distance (65m) for 50 km/h, but not the turning sight distance requirements. The proposed access location is acceptable since sufficient stopping sight distances (80m+ > 65m) are provided for approaching vehicles on Church Road. However, existing sight distance to the north does not meet turning sight distances for lower boundary and therefore, warning signs (W-007-1 and W-007-1 Tab) should be considered to advise drivers of the driveway ahead. **Table 5** is a summary of sight distances at the proposed access on Church Road.

TABLE 5 – SIGHT DISTANCES AT SITE ACCESS ON CHURCH ROAD FOR 50 KM/H

Movement	Direction	Required Sight Distance	At Church Road Access	Sight Distance Met?
Left Turn	Looking Left	98m	82m	No
	Looking Right	104m (lower boundary) 123m (upper boundary)	150m	Yes Yes
Right Turn	Looking Left	90m (lower boundary) 123m (upper boundary)	82m	No Yes
		Through on Major Road		Looking Forward



W-007-1 and W-007-1 Tab: Concealed Driveway Sign

5.0 OTHER MODES

5.1 Pedestrian Facilities and Bicycling Facilities

New 3m wide shared pathways (asphalt-paved multi-use trails) have been built along Wadams Way (south side) and Church Road (west side) adjacent to the site. The new multi-use trail provides for pedestrian / bicycling activities adjacent to the site. There is a new zebra marked pedestrian crosswalk on Wadams Way at Church Road, which provides a connection between the shared pathways. No additional pedestrian / bicycling facilities are required along the development frontage.

5.2 Transit

The community bus service (Transit Route #63) operates along Church Road. Currently this route (Sooke town loop) provides service four times each weekday. The nearest community bus stop is on Church Road south of Wadams Way. Along Sooke Road, transit service (Route #61) is provided to / from Langford/Victoria every 20 minutes to every 1 hour. There is a bus stop (Route #61) on Sooke Road at Church Road (400m south of the site). The transit #63 bus route is shown in **Figure 7**.

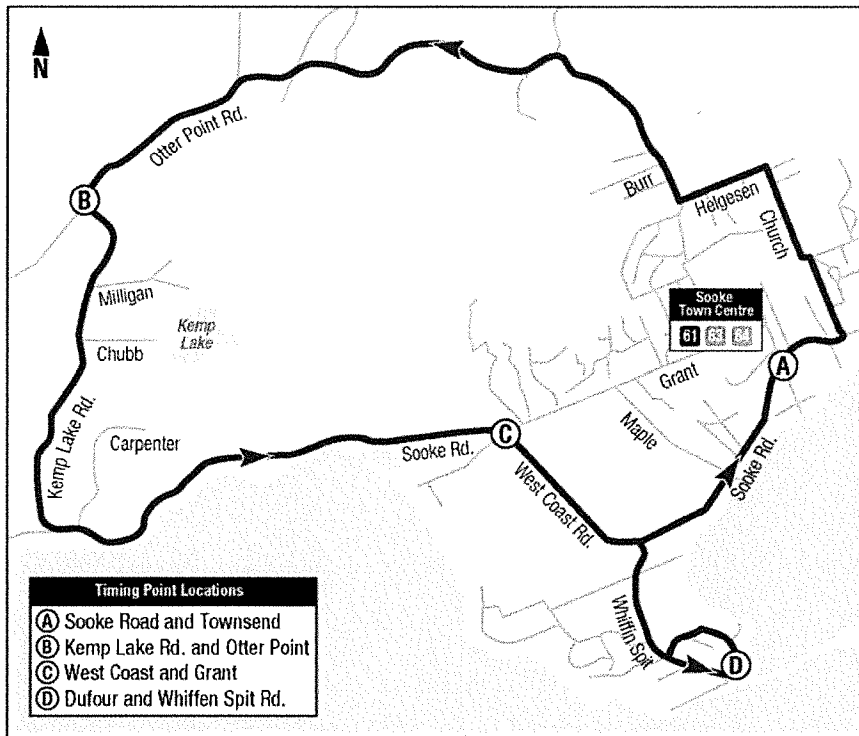


Figure 7 – Transit Route #63

6.0 CONCLUSIONS

At its highest traffic density the proposed site will generate 77 vehicle trips during the PM peak hour. The development will have little impact on traffic operations on the surrounding roadway network. With the development, at the stop controlled intersections (Church Road / Wadams Way and Wadams Way / Anna Marie Road) and the proposed accesses, all movements will operate at good levels of service (LOS A / B) in the long term.

The intersection of Sooke Road / Church Road, will be changed to a four legged signal with the Goodmere traffic (south leg added) in the next several months. The signalized intersection of Sooke Road / Church Road will operate at the same levels of service as existing for the eastbound / westbound movements on Sooke Road with the development (westbound LOS E due to existing traffic). The westbound movement will drop to a LOS F in the long term (10 year horizon) with a 2% annual growth rate without the development due to the lack of a right turn lane. All other movements will operate at acceptable levels of service (LOS D or better) at the signalized intersection in the long term with the development.

In the long term, a westbound right turn lane would be required, due to background traffic volumes, to mitigate the LOS F at the intersection of Sooke Road / Church Road. The westbound through movement will be improved to a LOS D at Sooke Road / Church Road if a 25m westbound right turn lane is added at the intersection.

The two proposed access locations meet the TAC's access spacing requirements for collector roads. The proposed site access on Wadams Way meets all sight distance requirements for 50 km/h. At the proposed site access on Church Road, measured sight distance (82m) looking to left (Church Road north) does not meet the required turning sight distance (98m) for 50 km/h; however, the minimum stopping sight distance (65m) is met. A warning sign (W-007-1 and supplementary tab sign) should be considered to advise drivers of the driveway ahead.

No additional pedestrian / bicycling facility is required since 3m wide shared pathways (asphalt paved) have been recently built along the development frontage roads (Church Road and Wadams Way).

7.0 RECOMMENDATIONS

Developer is to provide W-007-1 and W-007-1 tab sign for installation on Church Road.

APPENDIX A: SYNCHRO BACKGROUND

SYNCHRO MODELLING SOFTWARE DESCRIPTION

The traffic analysis was completed using Synchro and SimTraffic traffic modeling software. Results were measured in delay, level of service (LOS) and 95th percentile queue length. Synchro is based on the Highway Capacity Manual (HCM) methodology. SimTraffic integrates established driver behaviours and characteristics to simulate actual conditions by randomly “seeding” or positioning vehicles travelling throughout the network. The simulation is run five times (five different random seedings of vehicle types, behaviours and arrivals) to obtain statistical significance of the results.

Levels of Service

Traffic operations are typically described in terms of levels of service, which rates the amount of delay per vehicle for each movement and the entire intersection. Levels of service range from LOS A (representing best operations) to LOS E/F (LOS E being poor operations and LOS F being unpredictable/disruptive operations). LOS E/F are generally unacceptable levels of service under normal everyday conditions.

The hierarchy of criteria for grading an intersection or movement not only includes delay times, but also takes into account traffic control type (stop signs or traffic signal). For example, if a vehicle is delayed for 19 seconds at an unsignalized intersection, it is considered to have an average operation, and would therefore be graded as an LOS C. However, at a signalized intersection, a 19 second delay would be considered a good operation and therefore it would be given an LOS B. The table below indicates the range of delay for LOS for signalized and unsignalized intersections.

Table A1: LOS Criteria, by Intersection Traffic Control

Level of Service	Unsignalized Intersection Average Vehicle Delay (sec/veh)	Signalized Intersection Average Vehicle Delay (sec/veh)
A	Less than 10	Less than 10
B	10 to 15	11 to 20
C	16 to 25	21 to 35
D	26 to 35	36 to 55
E	36 to 50	56 to 80
F	More than 51	More than 81

APPENDIX B: 2014 EXISTING CONDITIONS

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/8/2014



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗				↗		↖	↗
Volume (vph)	86	434	10	6	616	129	0	0	4	120	3	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	30.0		0.0	25.0		7.0	0.0		0.0	0.0		15.0
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.99							0.96
Fr t		0.996			0.975				0.865			0.850
Fit Protected	0.950			0.950							0.955	
Satd. Flow (prot)	1511	1616	0	1556	1540	0	0	0	1417	0	1564	1392
Fit Permitted	0.137			0.485							0.955	
Satd. Flow (perm)	218	1616	0	794	1540	0	0	0	1417	0	1564	1342
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			14				330			96
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		237.9			233.1			78.4			388.9	
Travel Time (s)		17.1			16.8			5.6			28.0	
Confl. Peds. (#/hr)	22					22						6
Peak Hour Factor	0.92	0.91	0.83	0.38	0.87	0.92	0.92	0.92	0.60	0.86	0.38	0.92
Heavy Vehicles (%)	3%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Adj. Flow (vph)	93	477	12	16	708	140	0	0	7	140	8	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	93	489	0	16	848	0	0	0	7	0	148	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.21	1.21	1.21	1.21	1.22	1.21	1.21	1.21	1.21	1.21	1.21	1.21
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	1		1	1				1	1	2	1
Detector Template				Left					Right		Thru	
Leading Detector (m)	15.2	15.2		2.0	15.2				2.0	15.2	10.0	15.2
Trailing Detector (m)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Size(m)	15.2	15.2		2.0	15.2				2.0	15.2	0.6	15.2
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	0.0
Detector 2 Position(m)											9.4	
Detector 2 Size(m)											0.6	
Detector 2 Type											Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)											0.0	

Lanes, Volumes, Timings
3: Goodmere Rd/Church Rd & Sooke Rd

12/8/2014



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		Perm	NA				Perm	Perm	NA	Perm
Protected Phases	5	2			6						4	
Permitted Phases	2			6					4	4		4
Detector Phase	5	2		6	6				4	4	4	4
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0				7.0	7.0	7.0	7.0
Minimum Split (s)	14.3	25.5		25.5	25.5				23.2	23.2	23.2	23.2
Total Split (s)	15.3	43.5		28.5	28.5				33.2	33.2	33.2	33.2
Total Split (%)	19.9%	56.5%		37.0%	37.0%				43.1%	43.1%	43.1%	43.1%
Maximum Green (s)	11.0	38.0		23.0	23.0				28.0	28.0	28.0	28.0
Yellow Time (s)	3.5	4.5		4.5	4.5				4.2	4.2	4.2	4.2
All-Red Time (s)	0.8	1.0		1.0	1.0				1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.3	-1.5		0.0	-1.5				0.0		0.0	-1.2
Total Lost Time (s)	4.0	4.0		5.5	4.0				5.2		5.2	4.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None				None	None	None	None
Walk Time (s)				7.0	7.0				7.0	7.0	7.0	7.0
Flash Dont Walk (s)				13.0	13.0				7.0	7.0	7.0	7.0
Pedestrian Calls (#/hr)				10	10				10	10	10	10
Act Effct Green (s)	35.8	37.3		27.0	28.1				10.9		10.9	12.2
Actuated g/C Ratio	0.68	0.71		0.52	0.54				0.21		0.21	0.23
v/c Ratio	0.26	0.42		0.04	1.02				0.01		0.45	0.18
Control Delay	6.2	6.7		12.8	60.5				0.0		25.7	4.0
Queue Delay	0.0	0.0		0.0	0.0				0.0		0.0	0.0
Total Delay	6.2	6.7		12.8	60.5				0.0		25.7	4.0
LOS	A	A		B	E				A		C	A
Approach Delay		6.7			59.6						18.9	
Approach LOS		A			E						B	
Queue Length 50th (m)	2.9	20.2		1.0	~113.7				0.0		13.8	0.0
Queue Length 95th (m)	8.6	46.8		1.9	#191.3				0.0		10.9	5.1
Internal Link Dist (m)		213.9			209.1			54.4			364.9	
Turn Bay Length (m)	30.0			25.0								15.0
Base Capacity (vph)	453	1209		410	834				962		910	846
Starvation Cap Reductn	0	0		0	0				0		0	0
Spillback Cap Reductn	0	0		0	0				0		0	0
Storage Cap Reductn	0	0		0	0				0		0	0
Reduced v/c Ratio	0.21	0.40		0.04	1.02				0.01		0.16	0.08

Intersection Summary

Area Type: CBD
 Cycle Length: 77
 Actuated Cycle Length: 52.3
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.02
 Intersection Signal Delay: 35.6
 Intersection Capacity Utilization 72.8%
 Intersection LOS: D
 ICU Level of Service C

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/8/2014

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Goodmere Rd/Church Rd & Sooke Rd

ρ2 43.5 s		ρ4 33.2 s	
ρ5 15.3 s	ρ6 28.5 s		

HCM 2010 TWSC
2: Church Rd & Wadams Way

12/8/2014

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	19	65	50	111	99	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	300	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	74	83	92	92	78
Heavy Vehicles, %	0	0	2	3	1	0
Mvmt Flow	24	88	60	121	108	32

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	365	124	140
Stage 1	124	-	-
Stage 2	241	-	-
Critical Hdwy	6.4	6.2	4.12
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	2.218
Pot Cap-1 Maneuver	639	932	1443
Stage 1	907	-	-
Stage 2	804	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	610	932	1443
Mov Cap-2 Maneuver	610	-	-
Stage 1	907	-	-
Stage 2	768	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	2.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1443	-	610	932	-	-
HCM Lane V/C Ratio	0.042	-	0.039	0.094	-	-
HCM Control Delay (s)	7.6	0	11.1	9.3	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.3	-	-

Intersection

Int Delay, s/veh 1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	77	4	4	71	16	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	300	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	4	4	77	17	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	88	0	172	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	86	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1508	-	818	973
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	937	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1508	-	816	973
Mov Cap-2 Maneuver	-	-	-	-	800	-
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	935	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	846	-	-	1508	-
HCM Lane V/C Ratio	0.03	-	-	0.003	-
HCM Control Delay (s)	9.4	-	-	7.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Queuing and Blocking Report
 2014 Existing Pm Peak Hr

12/9/2014

Intersection: 2: Church Rd & Wadams Way

Movement	EB	EB	NB
Directions Served	L	R	LT
Maximum Queue (m)	10.4	16.0	10.7
Average Queue (m)	4.2	8.1	1.5
95th Queue (m)	11.7	13.8	7.3
Link Distance (m)		92.6	366.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	30.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Goodmere Rd/Church Rd & Sooke Rd

Movement	EB	EB	WB	WB	SB	SB
Directions Served	L	TR	L	TR	LT	R
Maximum Queue (m)	23.6	37.4	21.8	206.4	33.1	22.3
Average Queue (m)	9.7	18.7	2.0	93.1	15.7	11.1
95th Queue (m)	18.7	33.6	12.8	182.1	27.3	23.1
Link Distance (m)		225.6		222.3	366.8	
Upstream Blk Time (%)				3		
Queuing Penalty (veh)				0		
Storage Bay Dist (m)	30.0		25.0			15.0
Storage Blk Time (%)	0	1		41	12	2
Queuing Penalty (veh)	0	1		2	7	2

Intersection: 5: Anna Marie Rd & Wadams Way

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (m)	1.8	12.1
Average Queue (m)	0.1	4.7
95th Queue (m)	1.3	12.3
Link Distance (m)		77.1
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	30.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary





















Network wide Queuing Penalty: 13

APPENDIX C: 2014 POST DEVELOPMENT CONDITIONS

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/9/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	434	10	6	616	154	20	10	25	137	15	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	30.0		0.0	25.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.99						0.98	
Frt		0.996			0.971			0.893			0.901	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1511	1616	0	1556	1532	0	1556	1463	0	1556	1444	0
Flt Permitted	0.091			0.481			0.683			0.732		
Satd. Flow (perm)	145	1616	0	788	1532	0	1119	1463	0	1199	1444	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			20			27			76	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		237.9			233.1			78.4			388.9	
Travel Time (s)		17.1			16.8			5.6			28.0	
Confl. Peds. (#/hr)	22					22						6
Peak Hour Factor	0.92	0.91	0.83	0.38	0.87	0.92	0.92	0.92	0.92	0.89	0.38	0.92
Heavy Vehicles (%)	3%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Adj. Flow (vph)	108	477	12	16	708	167	22	11	27	154	39	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	489	0	16	875	0	22	38	0	154	115	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.21	1.21	1.21	1.21	1.22	1.21	1.21	1.21	1.21	1.21	1.21	1.21
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	1		1	1		1	2		1	2	
Detector Template				Left			Left	Thru			Thru	
Leading Detector (m)	15.2	15.2		2.0	15.2		2.0	10.0		15.2	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	15.2	15.2		2.0	15.2		2.0	0.6		15.2	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)								9.4			9.4	
Detector 2 Size(m)								0.6			0.6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	

Lanes, Volumes, Timings
 3: Goodmere Rd/Church Rd & Sooke Rd

12/9/2014



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	6.0	10.0		6.0	10.0		4.0	4.0		7.0	7.0	
Minimum Split (s)	14.3	25.5		14.3	25.5		23.0	23.0		23.2	23.2	
Total Split (s)	14.3	39.5		14.3	39.5		23.2	23.2		23.2	23.2	
Total Split (%)	18.6%	51.3%		18.6%	51.3%		30.1%	30.1%		30.1%	30.1%	
Maximum Green (s)	10.0	34.0		10.0	34.0		18.2	18.2		18.0	18.0	
Yellow Time (s)	3.5	4.5		3.5	4.5		4.0	4.0		4.2	4.2	
All-Red Time (s)	0.8	1.0		0.8	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.3	-1.5		0.0	-1.5		0.0	0.0		-1.2	0.0	
Total Lost Time (s)	4.0	4.0		4.3	4.0		5.0	5.0		4.0	5.2	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		13.0			13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		10			10		10	10		10	10	
Act Effct Green (s)	49.4	47.5		43.3	38.8		13.8	13.8		14.8	13.6	
Actuated g/C Ratio	0.68	0.66		0.60	0.54		0.19	0.19		0.20	0.19	
v/c Ratio	0.40	0.46		0.03	1.05		0.10	0.13		0.63	0.35	
Control Delay	12.0	9.7		5.3	69.1		24.6	13.3		38.2	13.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	12.0	9.7		5.3	69.1		24.6	13.3		38.2	13.7	
LOS	B	A		A	E		C	B		D	B	
Approach Delay		10.1			67.9			17.5			27.8	
Approach LOS		B			E			B			C	
Queue Length 50th (m)	4.3	25.5		0.6	~143.0		2.5	1.2		19.1	4.4	
Queue Length 95th (m)	16.2	75.8		1.1	#214.6		8.1	8.1		36.7	1.6	
Internal Link Dist (m)		213.9			209.1			54.4			364.9	
Turn Bay Length (m)	30.0			25.0			15.0			15.0		
Base Capacity (vph)	294	1062		611	830		282	389		319	417	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.37	0.46		0.03	1.05		0.08	0.10		0.48	0.28	

Intersection Summary

Area Type: CBD
 Cycle Length: 77
 Actuated Cycle Length: 72.3
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.05
 Intersection Signal Delay: 41.3
 Intersection Capacity Utilization 82.4%
 Intersection LOS: D
 ICU Level of Service E

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/9/2014

Analysis Period (min) 15

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Goodmere Rd/Church Rd & Sooke Rd

↙ ρ1	→ ρ2	↓ ρ4
14.3 s	39.5 s	23.2 s
↗ ρ5	← ρ6	↑ ρ8
14.3 s	39.5 s	23.2 s

Intersection

Int Delay, s/veh 3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	19	75	69	130	109	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	300	0	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	77	85	92	92	78
Heavy Vehicles, %	0	0	2	3	1	0
Mvmt Flow	24	97	81	141	118	32

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	439	135	151
Stage 1	135	-	-
Stage 2	304	-	-
Critical Hdwy	6.4	6.2	4.12
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	2.218
Pot Cap-1 Maneuver	579	919	1430
Stage 1	896	-	-
Stage 2	753	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	544	919	1430
Mov Cap-2 Maneuver	598	-	-
Stage 1	896	-	-
Stage 2	707	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	2.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1430	-	598	919	-	-
HCM Lane V/C Ratio	0.057	-	0.04	0.106	-	-
HCM Control Delay (s)	7.7	0	11.3	9.4	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	0.4	-	-

HCM 2010 TWSC
5: Anna Marie Rd & Wadams Way

12/9/2014

Intersection

Int Delay, s/veh 2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	7	77	4	4	71	19	16	3	7	10	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	300	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	92	60	60	92	70	70	60	60	60	25	60
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	12	84	7	7	77	27	23	5	12	17	4	7

Major/Minor	Major1	Major2	Minor1	Minor2								
Conflicting Flow All	104	0	0	90	0	0	219	228	87	223	218	91
Stage 1	-	-	-	-	-	-	110	110	-	104	104	-
Stage 2	-	-	-	-	-	-	109	118	-	119	114	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1500	-	-	1518	-	-	741	675	977	737	684	972
Stage 1	-	-	-	-	-	-	900	808	-	907	813	-
Stage 2	-	-	-	-	-	-	901	802	-	890	805	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1500	-	-	1518	-	-	726	667	977	717	675	972
Mov Cap-2 Maneuver	-	-	-	-	-	-	734	667	-	728	673	-
Stage 1	-	-	-	-	-	-	893	802	-	900	809	-
Stage 2	-	-	-	-	-	-	886	798	-	867	799	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.4	9.9	9.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	781	1500	-	-	1518	-	-	766
HCM Lane V/C Ratio	0.051	0.008	-	-	0.004	-	-	0.036
HCM Control Delay (s)	9.9	7.4	0	-	7.4	-	-	9.9
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	1	10	19	130	124	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	25	60	70	92	92	60
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	4	17	27	141	135	5

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	333	137	140
Stage 1	137	-	-
Stage 2	196	-	-
Critical Hdwy	6.4	6.2	4.1
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	2.2
Pot Cap-1 Maneuver	666	917	1456
Stage 1	895	-	-
Stage 2	842	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	653	917	1456
Mov Cap-2 Maneuver	653	-	-
Stage 1	895	-	-
Stage 2	825	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	1.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1456	-	850	-	-
HCM Lane V/C Ratio	0.019	-	0.024	-	-
HCM Control Delay (s)	7.5	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Queuing and Blocking Report
 2014 Post Development Pm with Goodmere

12/9/2014

Intersection: 2: Church Rd & Wadams Way

Movement	EB	EB	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (m)	9.1	14.9	18.4	2.5
Average Queue (m)	3.9	8.6	3.7	0.1
95th Queue (m)	11.2	13.8	12.7	1.3
Link Distance (m)		89.0	366.5	68.4
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	30.0			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Goodmere Rd/Church Rd & Sooke Rd

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	35.8	66.3	27.4	208.8	14.9	12.4	22.3	52.7
Average Queue (m)	15.2	26.3	2.5	146.2	5.0	1.9	17.0	17.2
95th Queue (m)	27.9	48.5	14.6	267.0	12.4	8.6	24.8	39.2
Link Distance (m)		227.3		221.0		67.8		366.5
Upstream Blk Time (%)				26				
Queuing Penalty (veh)				0				
Storage Bay Dist (m)	30.0		25.0		15.0		15.0	
Storage Blk Time (%)	1	3		44	1	0	25	6
Queuing Penalty (veh)	3	3		3	0	0	21	8

Intersection: 5: Anna Marie Rd/South Access & Wadams Way

Movement	EB	WB	NB	SB
Directions Served	LTR	L	LTR	LTR
Maximum Queue (m)	6.7	1.8	10.7	9.1
Average Queue (m)	0.3	0.1	5.5	3.6
95th Queue (m)	3.5	1.3	12.8	10.8
Link Distance (m)	102.1		77.2	47.3
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)		30.0		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Church Rd & East Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (m)	9.1	10.4
Average Queue (m)	2.6	0.6
95th Queue (m)	9.3	4.7
Link Distance (m)	62.0	68.4
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 38

APPENDIX D: 2024 LONG TERM CONDITIONS

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/18/2014



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Volume (vph)	105	529	31	19	751	157	50	24	61	146	36	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	30.0		0.0	25.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.99						0.98	
Frnt		0.991			0.975			0.892			0.912	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1511	1608	0	1556	1540	0	1556	1461	0	1556	1465	0
Flt Permitted	0.096			0.347			0.665			0.697		
Satd. Flow (perm)	153	1608	0	568	1540	0	1089	1461	0	1142	1465	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			17			66			84	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		237.9			233.1			78.4			388.9	
Travel Time (s)		17.1			16.8			5.6			28.0	
Confl. Peds. (#/hr)	22					22						6
Peak Hour Factor	0.92	0.91	0.85	0.60	0.87	0.92	0.92	0.92	0.92	0.89	0.60	0.92
Heavy Vehicles (%)	3%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Adj. Flow (vph)	114	581	36	32	863	171	54	26	66	164	60	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	617	0	32	1034	0	54	92	0	164	144	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.21	1.21	1.21	1.21	1.22	1.21	1.21	1.21	1.21	1.21	1.21	1.21
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	1		1	1		1	2		1	2	
Detector Template				Left			Left	Thru			Thru	
Leading Detector (m)	15.2	15.2		2.0	15.2		2.0	10.0		15.2	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	15.2	15.2		2.0	15.2		2.0	0.6		15.2	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)								9.4			9.4	
Detector 2 Size(m)								0.6			0.6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/18/2014



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	6.0	10.0		6.0	10.0		4.0	4.0		7.0	7.0	
Minimum Split (s)	14.3	25.5		14.3	25.5		23.0	23.0		23.2	23.2	
Total Split (s)	14.3	39.5		14.3	39.5		23.2	23.2		23.2	23.2	
Total Split (%)	18.6%	51.3%		18.6%	51.3%		30.1%	30.1%		30.1%	30.1%	
Maximum Green (s)	10.0	34.0		10.0	34.0		18.2	18.2		18.0	18.0	
Yellow Time (s)	3.5	4.5		3.5	4.5		4.0	4.0		4.2	4.2	
All-Red Time (s)	0.8	1.0		0.8	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.3	-1.5		0.0	-1.5		0.0	0.0		-1.2	0.0	
Total Lost Time (s)	4.0	4.0		4.3	4.0		5.0	5.0		4.0	5.2	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		13.0			13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		10			10		10	10		10	10	
Act Effct Green (s)	46.8	43.3		41.8	37.2		14.3	14.3		15.3	14.1	
Actuated g/C Ratio	0.66	0.61		0.59	0.53		0.20	0.20		0.22	0.20	
v/c Ratio	0.43	0.63		0.08	1.26		0.25	0.27		0.67	0.40	
Control Delay	13.3	15.1		5.6	150.8		27.0	12.2		39.8	15.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	13.3	15.1		5.6	150.8		27.0	12.2		39.8	15.4	
LOS	B	B		A	F		C	B		D	B	
Approach Delay		14.8			146.4			17.7			28.4	
Approach LOS		B			F			B			C	
Queue Length 50th (m)	4.9	38.9		1.3	~194.1		6.2	2.9		20.6	6.9	
Queue Length 95th (m)	17.0	110.1		2.8	#266.5		15.5	13.8		39.4	9.8	
Internal Link Dist (m)		213.9			209.1			54.4			364.9	
Turn Bay Length (m)	30.0			25.0			15.0			15.0		
Base Capacity (vph)	301	986		498	818		282	428		313	439	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.38	0.63		0.06	1.26		0.19	0.21		0.52	0.33	

Intersection Summary

Area Type: CBD
 Cycle Length: 77
 Actuated Cycle Length: 70.7
 Natural Cycle: 130
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.26
 Intersection Signal Delay: 79.2
 Intersection Capacity Utilization 91.9%
 Intersection LOS: E
 ICU Level of Service F

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/18/2014

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Goodmere Rd/Church Rd & Sooke Rd

↙ ρ1 14.3 s	→ ρ2 39.5 s	↓ ρ4 23.2 s
↗ ρ5 14.3 s	← ρ6 39.5 s	↑ ρ8 23.2 s

Intersection

Int Delay, s/veh 3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	23	79	61	154	121	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	300	0	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	85	92	92	79
Heavy Vehicles, %	0	0	2	3	1	0
Mvmt Flow	29	100	72	167	132	38

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	462	151	169
Stage 1	151	-	-
Stage 2	311	-	-
Critical Hdwy	6.4	6.2	4.12
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	2.218
Pot Cap-1 Maneuver	562	901	1409
Stage 1	882	-	-
Stage 2	748	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	531	901	1409
Mov Cap-2 Maneuver	591	-	-
Stage 1	882	-	-
Stage 2	706	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	2.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1409	-	591	901	-	-
HCM Lane V/C Ratio	0.051	-	0.049	0.111	-	-
HCM Control Delay (s)	7.7	0	11.4	9.5	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	0.4	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	93	5	5	87	20	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	300	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	60	60	92	70	60
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	101	8	8	95	29	15

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	109
Stage 1	-	-	105
Stage 2	-	-	111
Critical Hdwy	-	4.1	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.2	3.5
Pot Cap-1 Maneuver	-	1494	777
Stage 1	-	-	924
Stage 2	-	-	919
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1494	773
Mov Cap-2 Maneuver	-	-	772
Stage 1	-	-	924
Stage 2	-	-	914

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	827	-	-	1494	-
HCM Lane V/C Ratio	0.053	-	-	0.006	-
HCM Control Delay (s)	9.6	-	-	7.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection: 2: Church Rd & Wadams Way

Movement	EB	EB	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (m)	11.9	14.9	15.7	2.6
Average Queue (m)	5.4	9.1	2.9	0.1
95th Queue (m)	13.0	13.4	10.9	1.3
Link Distance (m)		90.8	366.5	67.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	30.0			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Goodmere Rd/Church Rd & Sooke Rd

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	37.3	85.7	31.7	237.5	19.8	26.4	22.4	56.4
Average Queue (m)	18.0	38.3	5.3	223.2	10.2	8.1	18.2	22.8
95th Queue (m)	33.5	68.1	20.0	255.5	19.2	21.6	25.2	47.6
Link Distance (m)		227.3		221.0		67.8		366.5
Upstream Blk Time (%)				77				
Queuing Penalty (veh)				0				
Storage Bay Dist (m)	30.0		25.0		15.0		15.0	
Storage Blk Time (%)	0	10	0	52	8	3	30	13
Queuing Penalty (veh)	2	10	0	10	7	1	34	18

Intersection: 5: Anna Marie Rd & Wadams Way

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (m)	3.6	9.2
Average Queue (m)	0.1	5.6
95th Queue (m)	1.8	12.7
Link Distance (m)		77.1
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	30.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		






















Network Summary

Network wide Queuing Penalty: 83

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/18/2014

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Volume (vph)	118	529	31	19	751	182	50	24	61	159	39	84	
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	
Storage Length (m)	30.0		0.0	25.0		25.0	15.0		0.0	15.0		0.0	
Storage Lanes	1		0	1		0	1		0	1		0	
Taper Length (m)	7.5			7.5			7.5			7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor					0.99						0.98		
Frnt		0.991			0.971			0.892			0.912		
Flt Protected	0.950			0.950			0.950			0.950			
Satd. Flow (prot)	1511	1608	0	1556	1531	0	1556	1461	0	1556	1465	0	
Flt Permitted	0.097			0.345			0.641			0.697			
Satd. Flow (perm)	154	1608	0	565	1531	0	1050	1461	0	1142	1465	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		5			21			66			85		
Link Speed (k/h)		50			50			50			50		
Link Distance (m)		237.9			233.1			78.4			388.9		
Travel Time (s)		17.1			16.8			5.6			28.0		
Confl. Peds. (#/hr)	22					22						6	
Peak Hour Factor	0.92	0.91	0.85	0.60	0.91	0.92	0.92	0.92	0.92	0.90	0.60	0.92	
Heavy Vehicles (%)	3%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%	
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0	
Parking (#/hr)												0	
Adj. Flow (vph)	128	581	36	32	825	198	54	26	66	177	65	91	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	128	617	0	32	1023	0	54	92	0	177	156	0	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right	
Median Width(m)		3.7			3.7			3.7			3.7		
Link Offset(m)		0.0			0.0			0.0			0.0		
Crosswalk Width(m)		4.8			4.8			4.8			4.8		
Two way Left Turn Lane													
Headway Factor	1.21	1.21	1.21	1.21	1.22	1.21	1.21	1.21	1.21	1.21	1.21	1.21	
Turning Speed (k/h)	24		14	24		14	24		14	24		14	
Number of Detectors	1	1		1	1		1	2		1	2		
Detector Template				Left			Left	Thru			Thru		
Leading Detector (m)	15.2	15.2		2.0	15.2		2.0	10.0		15.2	10.0		
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Size(m)	15.2	15.2		2.0	15.2		2.0	0.6		15.2	0.6		
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 2 Position(m)								9.4			9.4		
Detector 2 Size(m)								0.6			0.6		
Detector 2 Type								Cl+Ex			Cl+Ex		
Detector 2 Channel													

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/18/2014



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)								0.0				0.0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	6.0	10.0		6.0	10.0		4.0	4.0		7.0	7.0	
Minimum Split (s)	14.3	25.5		14.3	25.5		23.0	23.0		23.2	23.2	
Total Split (s)	14.3	39.5		14.3	39.5		23.2	23.2		23.2	23.2	
Total Split (%)	18.6%	51.3%		18.6%	51.3%		30.1%	30.1%		30.1%	30.1%	
Maximum Green (s)	10.0	34.0		10.0	34.0		18.2	18.2		18.0	18.0	
Yellow Time (s)	3.5	4.5		3.5	4.5		4.0	4.0		4.2	4.2	
All-Red Time (s)	0.8	1.0		0.8	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.3	-1.5		0.0	-1.5		0.0	0.0		-1.2	0.0	
Total Lost Time (s)	4.0	4.0		4.3	4.0		5.0	5.0		4.0	5.2	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		13.0			13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		10			10		10	10		10	10	
Act Effct Green (s)	46.6	42.9		41.1	36.6		14.8	14.8		15.8	14.6	
Actuated g/C Ratio	0.66	0.61		0.58	0.52		0.21	0.21		0.22	0.21	
v/c Ratio	0.47	0.63		0.08	1.28		0.25	0.26		0.70	0.42	
Control Delay	15.1	15.4		5.7	157.1		27.2	12.2		41.8	16.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	15.1	15.4		5.7	157.1		27.2	12.2		41.8	16.4	
LOS	B	B		A	F		C	B		D	B	
Approach Delay		15.3			152.5			17.7			29.9	
Approach LOS		B			F			B			C	
Queue Length 50th (m)	5.9	41.5		1.4	~198.4		6.3	2.9		22.8	8.3	
Queue Length 95th (m)	20.0	110.1		2.8	#276.0		15.5	13.8		#46.8	11.1	
Internal Link Dist (m)		213.9			209.1			54.4			364.9	
Turn Bay Length (m)	30.0			25.0			15.0			15.0		
Base Capacity (vph)	301	974		491	800		274	429		314	441	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.43	0.63		0.07	1.28		0.20	0.21		0.56	0.35	

Intersection Summary

Area Type: CBD
 Cycle Length: 77
 Actuated Cycle Length: 70.9
 Natural Cycle: 140
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.28
 Intersection Signal Delay: 81.1

Intersection LOS: F

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/18/2014

Intersection Capacity Utilization 97.8% ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Goodmere Rd/Church Rd & Sooke Rd

↙ φ1	→ φ2	↓ φ4
14.3 s	39.5 s	23.2 s
↗ φ5	← φ6	↑ φ8
14.3 s	39.5 s	23.2 s

HCM 2010 TWSC
2: Church Rd & Wadams Way

12/17/2014

Intersection

Int Delay, s/veh 3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	23	89	80	154	131	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	300	0	-	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	77	85	92	92	78
Heavy Vehicles, %	0	0	2	3	1	0
Mvmt Flow	29	116	94	167	142	38

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	518	162	181 0
Stage 1	162	-	- -
Stage 2	356	-	- -
Critical Hdwy	6.4	6.2	4.12 -
Critical Hdwy Stg 1	5.4	-	- -
Critical Hdwy Stg 2	5.4	-	- -
Follow-up Hdwy	3.5	3.3	2.218 -
Pot Cap-1 Maneuver	521	888	1394 -
Stage 1	872	-	- -
Stage 2	713	-	- -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	482	888	1394 -
Mov Cap-2 Maneuver	552	-	- -
Stage 1	872	-	- -
Stage 2	660	-	- -

Approach	EB	NB	SB
HCM Control Delay, s	10.1	2.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1394	-	552	888	-	-
HCM Lane V/C Ratio	0.068	-	0.053	0.13	-	-
HCM Control Delay (s)	7.8	0	11.9	9.7	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	0.4	-	-

HCM 2010 TWSC
 5: Anna Marie Rd/South Access & Wadams Way

12/17/2014

Intersection

Int Delay, s/veh 2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	7	93	5	5	87	19	20	3	9	10	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	300	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	92	60	60	92	70	70	60	60	60	25	60
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	12	101	8	8	95	27	29	5	15	17	4	7

Major/Minor	Major1	Major2	Minor1	Minor2								
Conflicting Flow All	122	0	0	109	0	0	259	267	105	264	258	108
Stage 1	-	-	-	-	-	-	129	129	-	125	125	-
Stage 2	-	-	-	-	-	-	130	138	-	139	133	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1478	-	-	1494	-	-	698	642	955	693	650	951
Stage 1	-	-	-	-	-	-	880	793	-	884	796	-
Stage 2	-	-	-	-	-	-	878	786	-	869	790	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1478	-	-	1494	-	-	682	633	955	671	641	951
Mov Cap-2 Maneuver	-	-	-	-	-	-	704	644	-	695	650	-
Stage 1	-	-	-	-	-	-	872	786	-	876	792	-
Stage 2	-	-	-	-	-	-	863	782	-	842	783	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.5	10.1	10.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	758	1478	-	-	1494	-	-	736
HCM Lane V/C Ratio	0.064	0.008	-	-	0.006	-	-	0.037
HCM Control Delay (s)	10.1	7.5	0	-	7.4	-	-	10.1
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Intersection

Int Delay, s/veh 1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	1	10	19	158	151	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	25	60	70	92	92	60
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	4	17	27	172	164	5

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	393	167	169 0
Stage 1	167	-	- -
Stage 2	226	-	- -
Critical Hdwy	6.4	6.2	4.1 -
Critical Hdwy Stg 1	5.4	-	- -
Critical Hdwy Stg 2	5.4	-	- -
Follow-up Hdwy	3.5	3.3	2.2 -
Pot Cap-1 Maneuver	615	882	1421 -
Stage 1	867	-	- -
Stage 2	816	-	- -
Platoon blocked, %	-	-	- -
Mov Cap-1 Maneuver	602	882	1421 -
Mov Cap-2 Maneuver	602	-	- -
Stage 1	867	-	- -
Stage 2	799	-	- -

Approach	EB	NB	SB
HCM Control Delay, s	9.6	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1421	-	809	-	-
HCM Lane V/C Ratio	0.019	-	0.026	-	-
HCM Control Delay (s)	7.6	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Queuing and Blocking Report
 2024 Post Development Pm with Goodmere

12/18/2014

Intersection: 2: Church Rd & Wadams Way

Movement	EB	EB	NB	SB
Directions Served	L	R	LT	TR
Maximum Queue (m)	11.6	15.8	17.3	1.3
Average Queue (m)	4.9	9.2	3.9	0.0
95th Queue (m)	12.4	14.1	13.0	0.9
Link Distance (m)		89.0	366.5	68.4
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	30.0			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Goodmere Rd/Church Rd & Sooke Rd

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (m)	37.3	78.8	32.3	238.2	20.4	31.0	22.5	55.8
Average Queue (m)	19.5	39.2	6.3	222.8	9.6	7.1	18.9	25.3
95th Queue (m)	35.3	68.6	24.0	258.5	18.9	20.8	26.0	48.8
Link Distance (m)		227.3		221.0		67.8		366.5
Upstream Blk Time (%)				79				
Queuing Penalty (veh)				0				
Storage Bay Dist (m)	30.0		25.0		15.0		15.0	
Storage Blk Time (%)	1	9		54	7	2	34	14
Queuing Penalty (veh)	8	11		10	6	1	42	22

Intersection: 5: Anna Marie Rd/South Access & Wadams Way

Movement	EB	WB	NB	SB
Directions Served	LTR	L	LTR	LTR
Maximum Queue (m)	7.2	3.6	14.8	11.8
Average Queue (m)	0.3	0.2	6.2	3.5
95th Queue (m)	3.0	2.3	13.9	11.0
Link Distance (m)	102.1		77.2	47.3
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)		30.0		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report
2024 Post Development Pm with Goodmere

12/18/2014

Intersection: 9: Church Rd & East Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (m)	9.1	7.4
Average Queue (m)	2.9	0.6
95th Queue (m)	9.8	4.3
Link Distance (m)	62.0	68.4
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 99

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/18/2014



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔	↔	↔	↔		↔	↔	
Volume (vph)	118	529	31	19	751	182	50	10	25	159	39	84
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	30.0		0.0	25.0		25.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.94					0.98	
Frt		0.991				0.850		0.893			0.912	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1511	1608	0	1556	1593	1379	1556	1463	0	1556	1465	0
Flt Permitted	0.102			0.348			0.639			0.732		
Satd. Flow (perm)	162	1608	0	570	1593	1294	1047	1463	0	1199	1465	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				92		27			85	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		237.9			233.1			78.4			388.9	
Travel Time (s)		17.1			16.8			5.6			28.0	
Confl. Peds. (#/hr)	22					22						6
Peak Hour Factor	0.92	0.91	0.85	0.60	0.91	0.92	0.92	0.92	0.92	0.90	0.60	0.92
Heavy Vehicles (%)	3%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Parking (#/hr)												0
Adj. Flow (vph)	128	581	36	32	825	198	54	11	27	177	65	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	617	0	32	825	198	54	38	0	177	156	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.21	1.21	1.21	1.21	1.22	1.21	1.21	1.21	1.21	1.21	1.21	1.21
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	1		1	1	1	1	2		1	2	
Detector Template				Left			Left	Thru			Thru	
Leading Detector (m)	15.2	15.2		2.0	15.2	15.2	2.0	10.0		15.2	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	15.2	15.2		2.0	15.2	15.2	2.0	0.6		15.2	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)								9.4			9.4	
Detector 2 Size(m)								0.6			0.6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lanes, Volumes, Timings
3: Goodmere Rd/Church Rd & Sooke Rd

12/18/2014



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)								0.0				0.0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8				4
Permitted Phases	2			6		6	8			4		
Detector Phase	5	2		1	6	6	8	8		4		4
Switch Phase												
Minimum Initial (s)	6.0	10.0		6.0	10.0	10.0	4.0	4.0		7.0		7.0
Minimum Split (s)	14.3	25.5		14.3	25.5	25.5	23.0	23.0		23.2		23.2
Total Split (s)	14.3	39.5		14.3	39.5	39.5	23.2	23.2		23.2		23.2
Total Split (%)	18.6%	51.3%		18.6%	51.3%	51.3%	30.1%	30.1%		30.1%		30.1%
Maximum Green (s)	10.0	34.0		10.0	34.0	34.0	18.2	18.2		18.0		18.0
Yellow Time (s)	3.5	4.5		3.5	4.5	4.5	4.0	4.0		4.2		4.2
All-Red Time (s)	0.8	1.0		0.8	1.0	1.0	1.0	1.0		1.0		1.0
Lost Time Adjust (s)	-0.3	-1.5		0.0	-1.5	-1.5	0.0	0.0		-1.2		0.0
Total Lost Time (s)	4.0	4.0		4.3	4.0	4.0	5.0	5.0		4.0		5.2
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0		3.0
Recall Mode	None	Min		None	Min	Min	None	None		None		None
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0		7.0
Flash Dont Walk (s)		13.0			13.0	13.0	11.0	11.0		11.0		11.0
Pedestrian Calls (#/hr)		10			10	10	10	10		10		10
Act Effct Green (s)	46.8	43.1		41.3	36.8	36.8	14.4	14.4		15.4		14.2
Actuated g/C Ratio	0.66	0.61		0.58	0.52	0.52	0.20	0.20		0.22		0.20
v/c Ratio	0.46	0.63		0.08	1.00	0.28	0.25	0.12		0.68		0.43
Control Delay	14.1	15.2		5.7	53.2	8.0	27.4	13.1		39.9		16.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	14.1	15.2		5.7	53.2	8.0	27.4	13.1		39.9		16.6
LOS	B	B		A	D	A	C	B		D		B
Approach Delay		15.0			43.3			21.5				29.0
Approach LOS		B			D			C				C
Queue Length 50th (m)	5.6	39.8		1.3	~132.4	8.0	6.3	1.2		22.5		8.3
Queue Length 95th (m)	19.2	110.1		2.8	#205.4	21.2	15.5	8.1		42.6		11.1
Internal Link Dist (m)		213.9			209.1			54.4				364.9
Turn Bay Length (m)	30.0			25.0		25.0	15.0			15.0		
Base Capacity (vph)	306	982		496	829	717	273	401		330		441
Starvation Cap Reductn	0	0		0	0	0	0	0		0		0
Spillback Cap Reductn	0	0		0	0	0	0	0		0		0
Storage Cap Reductn	0	0		0	0	0	0	0		0		0
Reduced v/c Ratio	0.42	0.63		0.06	1.00	0.28	0.20	0.09		0.54		0.35

Intersection Summary

Area Type: CBD
 Cycle Length: 77
 Actuated Cycle Length: 70.7
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.00
 Intersection Signal Delay: 30.8
 Intersection LOS: C

Lanes, Volumes, Timings

3: Goodmere Rd/Church Rd & Sooke Rd

12/18/2014

Intersection Capacity Utilization 82.5% ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Goodmere Rd/Church Rd & Sooke Rd

↙ ρ1 14.3 s	→ ρ2 39.5 s	↓ ρ4 23.2 s
↗ ρ5 14.3 s	← ρ6 39.5 s	↑ ρ8 23.2 s

Riparian Areas Regulation Assessment Report

Date 3 November, 2014

I. Primary QEP Information

First Name	Brian	Middle Name	David
Last Name	Wilkes		
Designation	RPBio	Company	Brian Wilkes and Associates Ltd
Registration #	300	Email	brianwilkes@shaw.ca
Address	630 Broadway St		
City	Victoria	Postal/Zip	V8Z 2G4
Prov/state	BC	Country	Canada
		Phone #	250 479-8837

III. Developer Information

First Name	Peter	Middle Name	
Last Name	Cook		
Company			
Phone #	604 908-7616	Email	petercook45@hotmail.com
Address	11680 Seahaven Place		
City	Richmond	Postal/Zip	V7A 3L9
Prov/state	BC	Country	Can

IV. Development Information

Development Type	Rezoning for Subdivision > 6 lots		
Area of Development (ha)	4.2	Riparian Length (m)	277
Lot Area (ha)	0.035	Nature of Development	new
Proposed Start Date	Nov 1, 2014	Proposed End Date	Nov 30, 2015

V. Location of Proposed Development

Street Address (or nearest town)	2182 Church Rd		
Local Government	District of Sooke	City	Sooke
Stream Name	Tributary of Throup Stream		
Legal Description (PID)	008-078-416	Region	1
Stream/River Type	stream	DFO Area	South coast
Watershed Code	Not assigned		
Latitude	48	22	58
Longitude	123	43	20

Completion of Database Information includes the Form 2 for the Additional QEPs, if needed.
Insert that form immediately after this page.

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Section 1. Description of Fisheries Resources Values and a Description of the Development proposal

2182 Church Rd is a 4.2ha lot near the centre of the village of Sooke. In overview, approximately 70% of the lot is cleared and used for grazing cattle and sheep. A rise in the southern third of the property retains some tree cover (see Figure 1, Property Overview). This rise also breaks the property into two catchments, as shown on the attached Figure 2. The District of Sooke has recently built a road, Wadams Way, along the south property boundary. This road connects Church Road with Otter Point Road, and it may continue east in the future to form a potential by-pass for the village.

There are two watercourses on the property. One is located in the south-east corner and cuts across the property on a diagonal for approximately 65m. The second runs the width of the property, a distance of approximately 212m, parallel to and approximately 22m from the north property boundary.

The southern watercourse passes under Wadams Way near Anna Marie Rd, and captures drainage from the south side of Wadams Way, and the ditches along the north side of Wadams Way (photos 1, 2, 3). The drainage then flows north along the west side of Church Rd, and is culverted under the driveway onto the subject property. This watercourse is an old excavated ditch, approximately 2m wide, with relatively even banks. The ditch has no fish habitat features such as riffle-pool sections, overhanging banks or large stones or woody debris. There are agronomic grasses and some common rush in the riparian area, but no trees or shrubs. In figure 1, a small fragment of forest cover shown in the SE corner of the property is now gone due to the construction of Wadams Way.

The north watercourse seems to be more like a cattle trail that water flows in, rather than a stream (photo 4). There are two wide areas along its course where it looks like cattle wallow. One can be seen as a light area near the NW corner of the property on Fig 1. The rest of the watercourse is a narrow trail across the meadow. There were cattle droppings near and in the narrow trench (25cm wide) that water flows in, thereby creating the watercourse. Some erosion of the soil is evident at a few points within this trench. It arises just west of the west property boundary, presumably from the end of the parking lot off Townsend Rd along the north side of lot 2191, and possibly contains drainage collected off the low-gradient slope from the height of land on the property. On the day of the site visit, October 15, 2014, there was no flow in this watercourse after a few days of intermittent rain.

The direction of flow is east, downhill on a gentle gradient (1-2%) where at the NE corner of the lot, this flow joins the flow along the west side of Church Rd from the south, and joins other flows in the ditch along the west and east side of church Rd north of Throup Rd. These ditches all converge in this NE corner of the lot, and flows are

directed by culvert under Church Rd to the east side, then flow under Throup Rd and into culverts beneath the townhouse development east of the corner of Church Rd and Throup Rd. The flows in these ditches, when running, appear to form the head waters of Throup Stream.

Habitat features on the north watercourse are similar to the south; it is in open meadow consisting of well grazed agronomic grasses, thistle and common rush (photo 4). Again, there are no habitat features such as riparian trees, shrubs, no overhanging banks, riffles or pool areas, exposed gravel, or large woody debris in the channel. The area in the northeast corner of the lot contains wetland plants such as common rush and slough sedge. It is clear that the soils in this area are wetted for a good part of the season, as both these plants like to grow in wet ground. Other elements of wetland are missing, including soils that do not appear to have gleyed lenses. As well, upland plants such as thistle are also growing along the watercourse edges and elsewhere in the field.

Throup Stream is fish habitat, as indicated in previous work (See RAR Report 2776 by B.W and Associates, 2010). According to SHIP Environmental Consultants Ltd., Throup Stream is part of a 0.5km² watershed that drains part of the designated Urban Containment Area west of the Sooke River Estuary¹. The stream flows into Sooke Harbour through an estuary designated as a marine receiving environment of “high” sensitivity. More recently, lower Throup Stream was listed as providing habitat for coho and chum salmon.²

As the headwaters of Throup Stream, and because these watercourses contain intermittent overland flow to fish habitat farther downstream, they are captured under the RAR. However, it is clear that these watercourses themselves do not directly supply fish habitat, and have no typical habitat features. We are persuaded that the site circumstances of both watercourses make the strict application of the RAR unnecessary. If the purpose is to continue to supply water and nutrients to downstream habitats, then this can be accomplished on this site using some alternative drainage arrangements that do not involve establishing a SPEA and requiring that the riparian zones be re-vegetated with native species.

¹ SHIP Environmental Consultants Ltd. Dec 1999. Prioritization of Significant Watersheds Draining to Sooke Bay, Sooke Inlet, Sooke Harbour, and Sooke Basin. Prepared for: CRD.

² Rainwater Management Plan: Ella Stream, Nott Brook, Throup Stream, and Wright Road Creek Watersheds report. 2012. by KWL for District of Sooke (cited in Swell Environmental Consulting, December 2013).

2. Results of Detailed Riparian Assessment

SE Watercourse

Date: 3/1/2014

Description of Water bodies involved (number, type)	
Stream	
Wetland	
Lake	
Ditch	X
Number of reaches	1
Reach #	1

unnamed ditch SE corner of property

Channel width and slope and Channel Type (use only if water body is a stream or a ditch, and only provide widths if a ditch)

	Channel Width(m)	Gradient (%)	
starting point	2.1		I, <u>Brian Wilkes</u> (<i>name of qualified environmental professional</i>), hereby certify that: a) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i> ; b) I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Peter Cook</u> (<i>name of developer</i>); c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and d) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.
upstream	2.1		
	2	1%	
	2		
	1.9		
downstream	2		
	2		
	1.9		
	2.1		
	2		
	1.9	1%	
Total: minus high /low	18		
mean	2		
	R/P	C/P	
Channel Type	X		

Site Potential Vegetation Type (SPVT)

	Yes	No	
SPVT Polygons		X	Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes
			I, <u>Brian Wilkes</u> (<i>name of qualified environmental professional</i>), hereby certify that: a) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i> ; b) I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Peter Cook</u> (<i>name of developer</i>); c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and d) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.
Polygon No:			Method employed if other than TR
	LC	SH	TR
SPVT Type			X

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	1	South side, or right bank of ditch facing downstream					
LWD, Bank and Channel Stability ZOS (m)	n/a						
Litter fall and insect drop ZOS (m)	n/a						
Shade ZOS (m) max	n/a	South bank	Yes	X	No		
Ditch	Justification description for classifying as a ditch (manmade, no significant headwaters or springs, seasonal flow)				Straight channel with even banks and level bottom, clearly excavated for drainage purposes.		
Ditch Fish Bearing	Yes		No	X	If non-fish bearing insert no fish bearing status report	X see below	
SPEA maximum	2	(For ditch use table3-7)					

Segment No:	2	North side, left bank of ditch facing downstream					
LWD, Bank and Channel Stability ZOS (m)	n/a						
Litter fall and insect drop ZOS (m)	n/a						
Shade ZOS (m) max	n/a	South bank	Yes		No	X	
SPEA maximum	2	See Figure 3					

I, Brian Wilkes (*name of qualified environmental professional*), hereby certify that:

a) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the *Fish Protection Act*;

b) I am qualified to carry out this part of the assessment of the development proposal made by the developer Peter Cook (*name of developer*);

c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and

d) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

North Watercourse

Description of Water bodies involved (number, type)	unnamed ditch near north property line	
Stream		
Wetland		
Lake		
Ditch	X	
Number of reaches	1	
Reach #	1	

Channel width and slope and Channel Type (use only if water body is a stream or a ditch, and only provide widths if a ditch)

Channel Width(m)	Gradient (%)
starting point <u>0.5</u>	<u>I, Brian Wilkes (name of qualified environmental professional),</u>

upstream	0.8			hereby certify that: e) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i> ; f) I am qualified to carry out this part of the assessment of the development proposal made by the developer Peter Cook (<i>name of developer</i>) ; g) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and h) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.	
	0.5				1%
0.8					
3.0					
downstream	0.5				
	0.5				
	0.6				
	2				
	0.8				
	1.0				2%
Total: minus high /low mean	7.5				
	0.83				
	R/P	C/P	S/P		
Channel Type	X				

Site Potential Vegetation Type (SPVT)

	Yes	No	
SPVT Polygons		X	Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes
	I, <u>Brian Wilkes</u> (<i>name of qualified environmental professional</i>), hereby certify that: e) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i> ; f) I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Peter Cook</u> (<i>name of developer</i>) ; g) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and h) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.		
Polygon No:	1	Method employed if other than TR	
SPVT Type	LC	SH	TR
			X

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	1	South side of ditch facing east or downstream					
LWD, Bank and Channel Stability ZOS (m)	n/a						
Litter fall and insect drop ZOS (m)	n/a						
Shade ZOS (m) max	n/a		South bank	Yes	X	No	
Ditch	Justification description for classifying as a ditch (manmade, no significant headwaters or springs, seasonal flow)					Narrow cattle trail containing running water intermittently, Some sections appear to have been excavated, straight with a level bottom.	
Ditch Fish Bearing	Yes		No	X	If non-fish bearing insert no fish bearing status report	See below	
SPEA maximum	2	(For ditch use table3-7)					

Segment No:	2	North side of ditch facing east					
LWD, Bank and Channel Stability ZOS (m)	n/a						

Litter fall and insect drop ZOS (m)	n/a				
Shade ZOS (m) max	n/a	South bank	Yes	No	X
SPEA maximum	2	See Figure 4			

Comments

Both ditches on the property do not provide fish habitat directly but do provide seasonal overland flow to the lower reaches of Throup Stream. The District of Sooke should be open to alternative site drainage plans that permit site development and provide continued water flow down to lower Throup Stream. The ditch in the SE corner of the property could be enclosed in a culvert, provided that the riparian area lost is compensated for elsewhere on the property. The ditch parallel to the north property line could be moved into an engineered open swale along the property line and re-vegetated with native species, permitting development of the site in its present location. These approaches would permit the intent of the RAR to be fulfilled: providing water and nutrients to fish habitat in lower Throup Stream, while at the same time permitting more rational site subdivision and development.

Non fish-bearing Status Report

This report applies to both ditches. First, a perched culvert under Charters Rd, approximately half a kilometer farther downstream on Throup Stream, is a migration block to fish. This was discovered during the RAR assessment for Report number 2776 from 2010. The subject ditches cannot be accessed by fish. They have no habitat features that could sustain fish: no overhanging banks, no pools, no woody debris or large stones, and no spawning habitat. Water flows overland in them seasonally but they are dry likely from May to October. Their form and characteristics convince us that these are not fish-bearing ditches.

Section 3. Site Plan

Insert jpg file below

Site Plan

See attached figures 1 to 4

Section 4. Measures to Protect and Maintain the SPEA

1. Danger Trees	The ditches have no trees anywhere near them, so danger from trees is not a concern.
<p>I, <u>Brian Wilkes</u> (<i>name of qualified environmental professional</i>), hereby certify that:</p> <p>e) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>f) I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Peter Cook</u> (<i>name of developer</i>);</p> <p>g) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
2. Windthrow	Since there are no trees, the danger of windthrow is not a concern.
<p>I, <u>Brian Wilkes</u> (<i>name of qualified environmental professional</i>), hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Peter Cook</u> (<i>name of developer</i>);</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
3. Slope Stability	The land is relatively flat on the lot, so there is no evidence that slope stability is a concern.
<p>I, <u>Brian Wilkes</u> (<i>name of qualified environmental professional</i>), hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Peter Cook</u> (<i>name of developer</i>);</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
4. Protection of Trees	There are no trees anywhere close to these ditches. Protection of trees is not relevant to this assessment.
<p>I, <u>Brian Wilkes</u> (<i>name of qualified environmental professional</i>), hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Peter Cook</u> (<i>name of developer</i>);</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
5. Encroachment	We believe the site developers will propose a new drainage swale along the north property boundary. Once established, this will form replacement riparian habitat for the drainages on the site. Encroachment into this new swale will be limited by low fencing and signage.
<p>I, <u>Brian Wilkes</u> (<i>name of qualified environmental professional</i>), hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Peter Cook</u> (<i>name of developer</i>);</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
6. Sediment and Erosion Control	Best management practices will be employed during site development, including the use of silt fences, and covering soil piles in inclement weather. As this is the rezoning stage, detailed erosion and sediment control plans are not yet available, but will be prepared by the site development engineers.
<p>I, <u>Brian Wilkes</u> (<i>name of qualified environmental professional</i>), hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Peter Cook</u> (<i>name of developer</i>);</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In</p>	

<p>carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
<p>7. Storm water Management</p>	<p>A detailed storm water management plan is not yet available. Storm flow can be directed to existing ditches, and to engineered swale if constructed. Some form of retention on site may be necessary. If so, then the retention can be enhanced to improve its riparian habitat values.</p>
<p>I, <u>Brian Wilkes</u> (<i>name of qualified environmental professional</i>), hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Peter Cook</u> (<i>name of developer</i>);</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
<p>8. Floodplain Concerns (highly mobile channel)</p>	<p>There is no evidence that there are floodplain concerns on this property</p>
<p>I, <u>Brian Wilkes</u> (<i>name of qualified environmental professional</i>), hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Peter Cook</u> (<i>name of developer</i>);</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	

Section 5. Environmental Monitoring

Attach text or document files explaining the monitoring regimen Use your "return" button on your keyboard after each line. It is suggested that all document be converted to PDF *before* inserting into the PDF version of the assessment report. Include actions required, monitoring schedule, communications plan, and requirement for a post development report.

At the re-zoning and subdivision stage, environmental monitoring is not required.

For construction, environmental monitoring of the site will consist of a pre-construction site meeting to review environmental protection and erosion and sediment control plans. Then several site inspections would be carried out during construction to confirm conformity with the plans.

A post construction report would also be prepared and filed through the RARNS

Section 7. Professional Opinion

Assessment Report Professional Opinion on the Development Proposal's riparian area.

Date

1. I/Brian Wilkes, R.P.Bio

Please list name(s) of qualified environmental professional(s) and their professional designation that are involved in assessment.)

hereby certify that:

- a) I am/We are qualified environmental professional(s), as defined in the Riparian Areas Regulation made under the *Fish Protection Act*,
- b) I am/We are qualified to carry out the assessment of the proposal made by the developer Peter Cook (name of developer), which proposal is described in section 3 of this Assessment Report (the "development proposal"),
- c) I have/We have carried out an assessment of the development proposal and my/our assessment is set out in this Assessment Report; and
- d) In carrying out my/our assessment of the development proposal, I have/We have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation; AND

2. As qualified environmental professional(s), I/we hereby provide my/our professional opinion that:

- a) if the development is implemented as proposed by the development proposal there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes in the riparian assessment area in which the development is proposed, **OR**
- b) if the streamside protection and enhancement areas identified in this Assessment Report are protected from the development proposed by the development proposal and the measures identified in this Assessment Report as necessary to protect the integrity of those areas from the effects of the development are implemented by the developer, there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes in the riparian assessment area in which the development is proposed.



Fig. 1. 2182 Church Rd, Property Overview

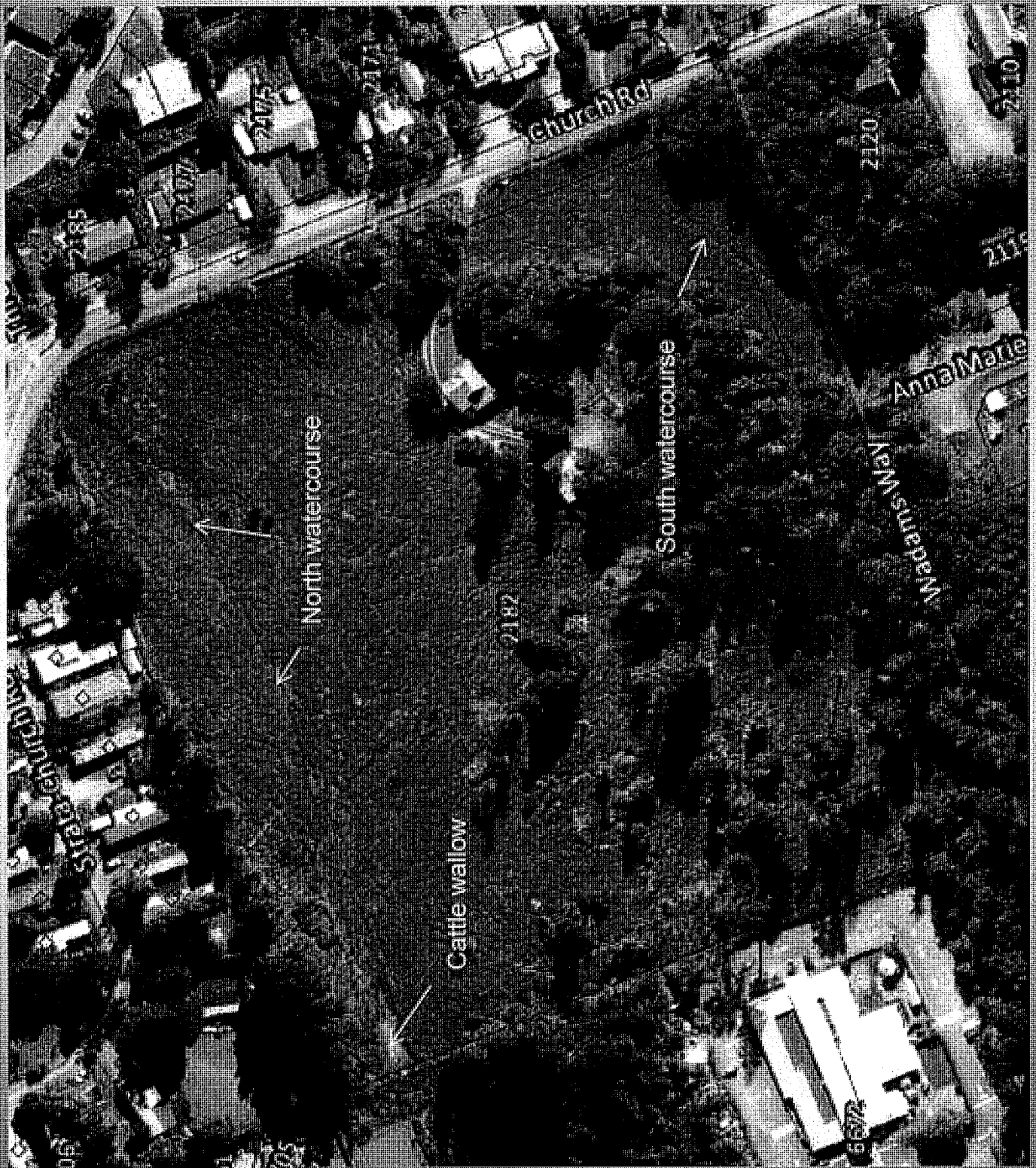




Fig. 2. 2182 Church Rd, Approximate catchment areas

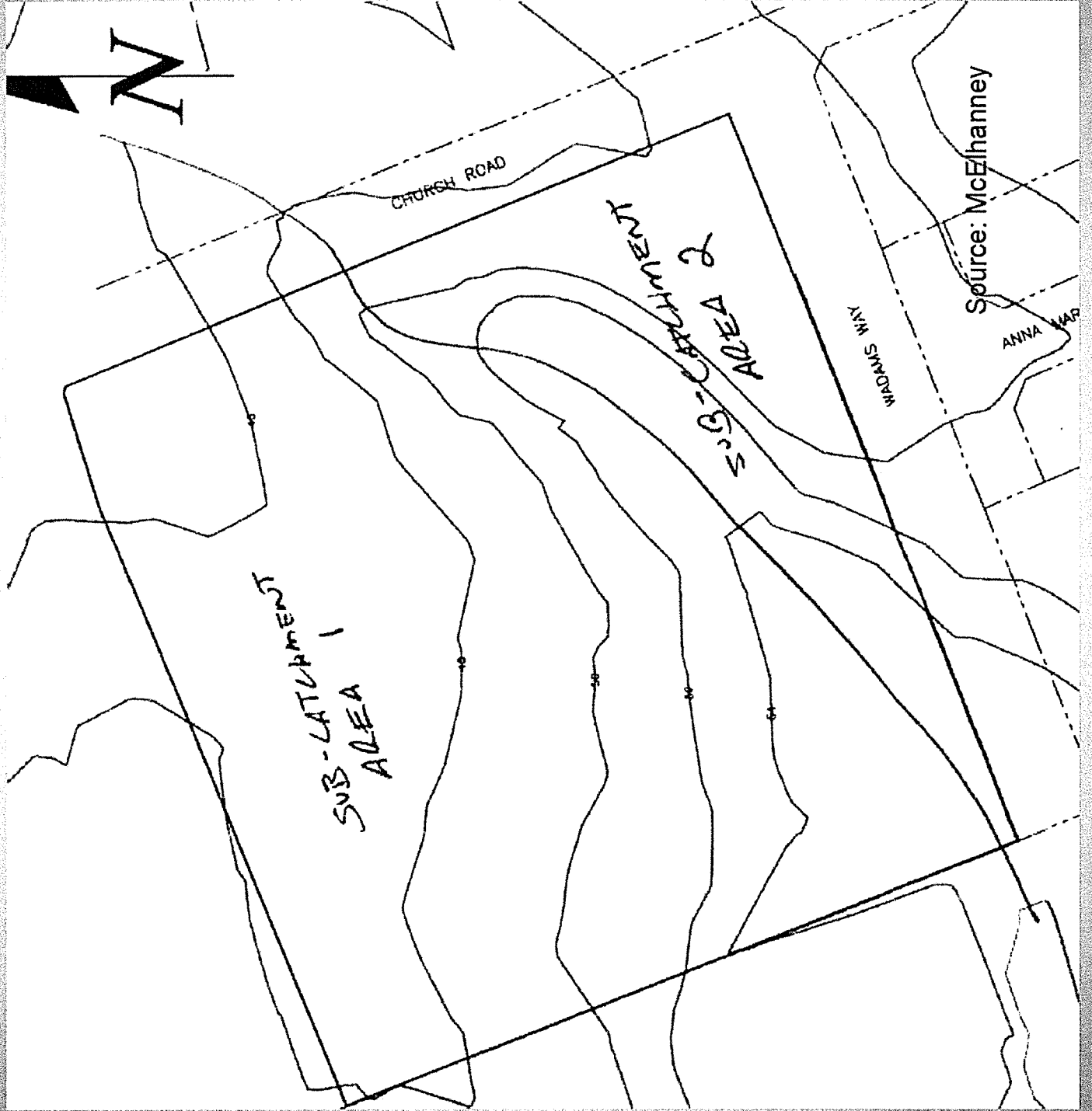


Fig. 3. Results of RAR Assessment, 2182 Church Rd, south watercourse, 2m SPEA



Legend

Location of ditch and high water marks

RAA Boundary

Litterfall/Insect drop n/a

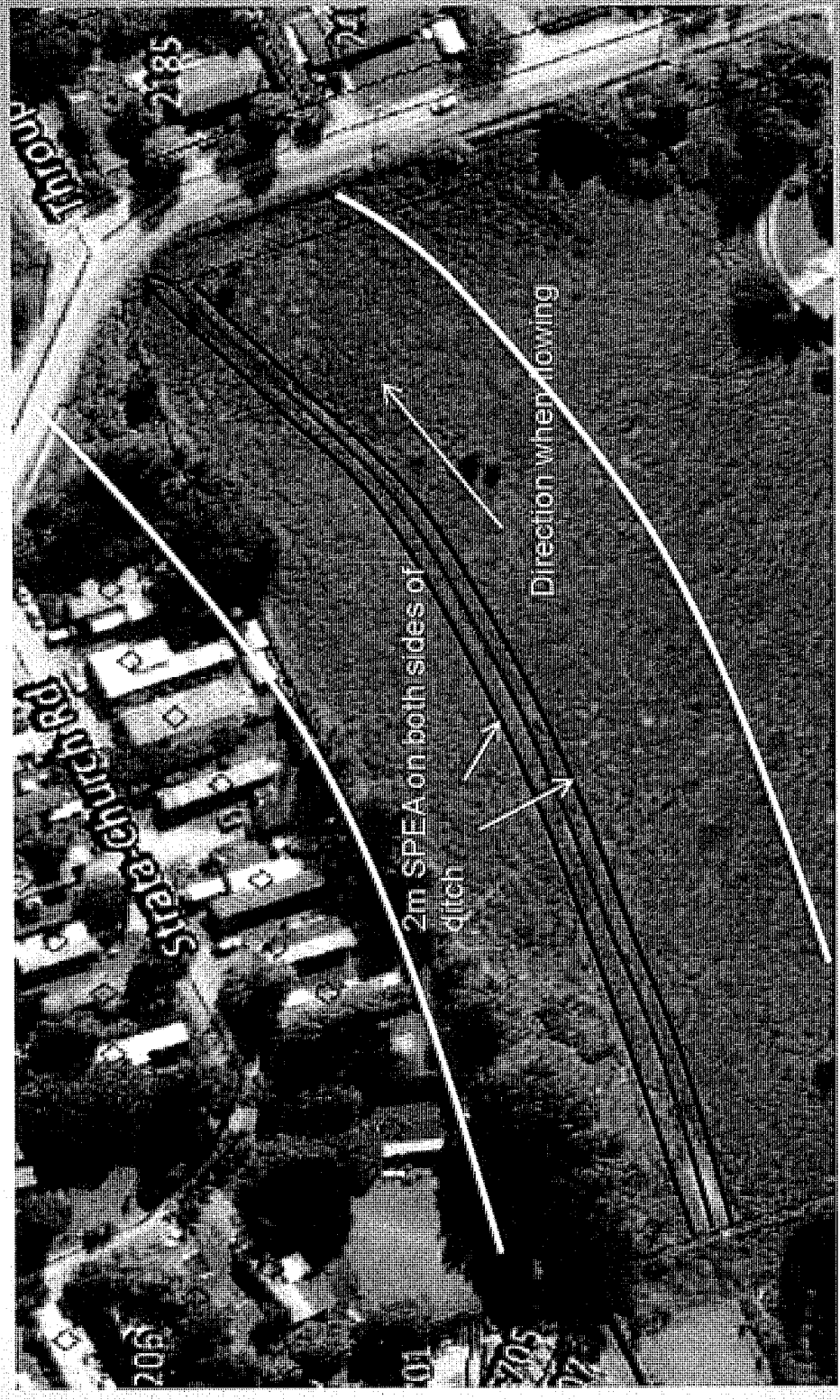
TWD, shade n/a

SPEA Boundary

Scale: 15m

Note: Locations are approximate subject to surveyor confirmation. At this scale, the line width of the stream is several metres wide on the ground. The HWM on the ground would correspond generally to either side of the blue line. The red SPEA line distance is exaggerated for the purpose of illustration.

Fig. 4. Results of RAR Assessment, 2182 Church Rd, north watercourse, 2m SPEA



Legend

Location of ditch and high water marks

RAA Boundary

Litterfall/insect drop n/a

LWD, shade n/a

2m SPEA Boundary

Scale: 30 m

Note: Locations are approximate subject to surveyor confirmation. At this scale, the line width of the stream is several metres wide on the ground. The HWMM on the ground would correspond generally to either side of the blue line. The red SPEA line distance is exaggerated for the purpose of illustration.

Photos

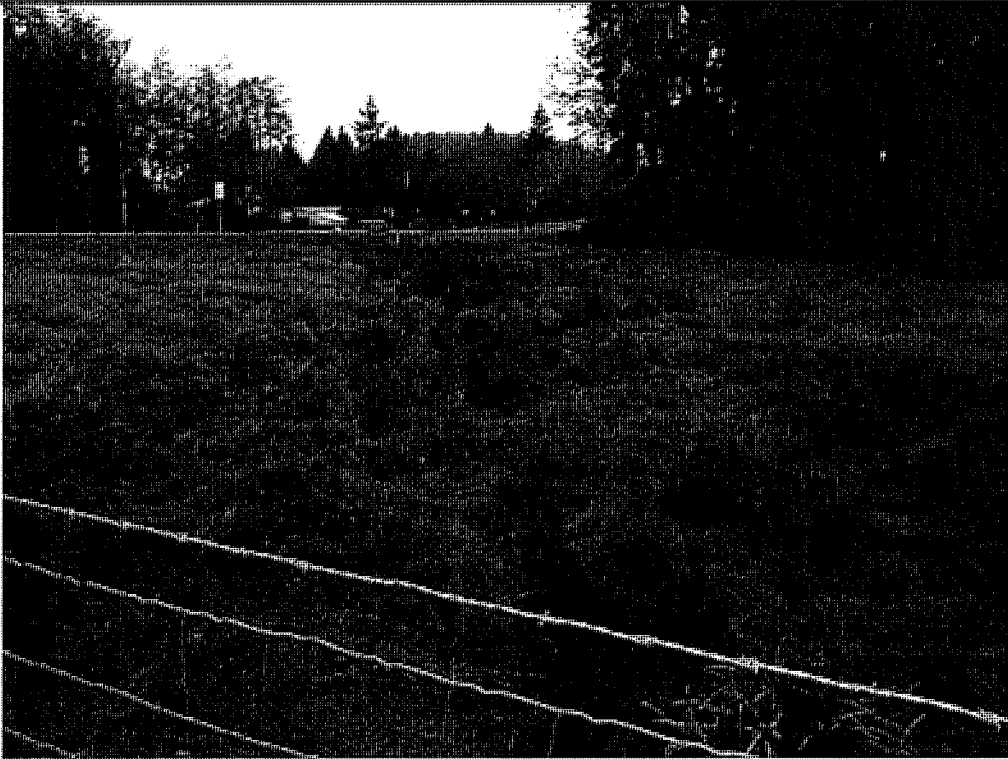
1

SE ditch drains toward top of picture across the corner of the property



2

The ditch as seen from downstream along Church Rd. Note limited riparian vegetation



3

The ditch seen from the d/s end of new asphalt walkway along w side of Church Rd.



4

The watercourse across N side of property. Note dead thistle and agronomic grasses



5

Upper end of drainage is a cattle wallow without vegetation



6

Another wallow was found 2/3 down the property



7

In places, the channel is only about 25cm wide. Both wetland and upland plants are present



8

Lots of evidence of cattle droppings in the channel, here about 2m wide





Stantec Consulting Ltd.
400-655 Tyee Road, Victoria BC V9A 6X5

June 19, 2015
File: 112610251

Attention: Elisabeth Nelson, P.Eng, Director Of Development Services

District of Sooke
2205 Otter Point Road
Sooke British Columbia
V0S 1N0
Canada

Dear Elisabeth,

Reference: Sooke Sewer Model: Serviceability Review for the Proposed Development 2182 Church Road.

Stantec have received an application for a serviceability review to assess the current capacity of the Sooke Sanitary Sewer System to accept a new connection for a proposed development at the corner of Wadams Way and Church Road. The proposed new development is for 129 residential units.

The commercial portion of the application has been removed from the Serviceability Review at the request of the District. This review considers only the residential portion of the application.

The following is a summation of the flow calculations carried out by Stantec to assess the impact of this development on the system:

- Maximum flow equivalent of 144.1 Single family dwellings @ 3 capita/home = 432.3 people.
 - It is noted from the application that this is the absolute maximum density that could be constructed on the site. It is possible that the final configuration may result in a lower density and sanitary flow than detailed in this review.
 - It is assumed that this flow equivalent accounts for the potential for duplexes as part of the development.
- Average Dry Weather Flow (ADWF) of 300 L/d/person = 129,690.00 L/d = 1.50 L/s
- A Peaking Factor as per Harmon's equation = 4.01
- Peak Dry Weather Flow (PDWF) = 4.01 x 1.50 L/s = 6.01 L/s
- Infiltration and Inflow (I&I) for 4.9ha lot = 0.17L/s/ha x 4.9 ha = 0.83 L/s

Design with community in mind



June 19, 2015
Elisabeth Nelson, P.Eng, Director Of Development Services
Page 2 of 3

Reference: Sooke Sewer Model: Serviceability Review for the Proposed Development 2182 Church Road.

- o I&I values based on MMCD Design Guidelines.
- Peak Wet Weather Flow (PWWF) = PDWF + I&I = 6.84 L/s

With the addition of the proposed new developments the Sooke sewer system will encounter an additional flow of approximately 6.84 L/s. There is currently a 50mm diameter pipe that runs on Church Road on the east side of the property; this line does not have sufficient capacity to accommodate the estimated flow from the new development. As this development is at a lower elevation than its surrounding areas, a pump station will be required to make the connection to the surrounding gravity systems. The current 50mm diameter line on Church runs north and connects to the gravity system which ultimately connects onto Gatewood Road. This Gatewood line is a potential bottleneck in the system, and it is therefore recommended to route the flow from the 2182 Church Road development away from this area. The recommended connection points are as detailed below:

1. Install a new forcemain from the proposed development west to Townsend Road and connect into the existing line at the intersection of Wadams Way and Townsend (manhole # MH-TW-04). This line connects into the 300mm gravity main on West Coast Road which then flows to the West Coast Road pump station. Approximately 400m of 100mm diameter forcemain will likely be required to accommodate this option.
2. Install a new forcemain to connect into the south flowing main on Church Road just south of Wadams Way. This line feeds into the gravity line flowing east down to Sooke Road Pump Station at the junction of Belvista Place and West Coast Road; the flow is then pumped west up the hill to the intersection of West Coast Road and Townsend flows to the West Coast Road Pump Station. Approximately 175m of 100mm diameter forcemain will be required to accommodate this option.

Either of the above options are viable options for connection points, but option 1, to route a new forcemain to Townsend Road, is recommended as this option has the added benefit of redirecting flow away from the Sooke Road Pump Station and the gravity line which flow east to it on Sooke Road.



June 19, 2015
Elisabeth Nelson, P.Eng, Director Of Development Services
Page 3 of 3

Reference: Sooke Sewer Model: Serviceability Review for the Proposed Development 2182 Church Road.

If you have any questions regarding the information in this memo, please feel free to contact the undersigned.

Regards,

STANTEC CONSULTING LTD.

A handwritten signature in black ink that reads "Al Ghanam". The signature is written in a cursive, flowing style.

Al Ghanam, P.Eng
Principal
Phone: 250-389-2347
Fax: 250-382-0514
al.ghanam@stantec.com

Attachment:

pd v:\1126\active\112610205\serviceability_reviews\let_ss_20150617_2182_church_road.docx.0

Amenity Discussion: 2182 Church Road Rezoning Application

Gord Howie provided an overview of the staff report for the Committee.

Dave Smith, McElhanney Consulting Services representing the applicant, addressed the Committee as to the rezoning application for 2182 Church Road. Mr. Smith advised that the property owners would like to keep flexibility in the plans for the development. Mr. Smith reported that the property owners are opposed to a cash contribution for amenities and that they would like Council to take into consideration the property the landowners sold to the District in 2013 at a reduced value to allow for the creation of Wadams Way.

Peter Cook, property owner, advised that the property at 2182 Church Road has been in his family for 74 years. Mr. Cook stated that the family worked collaboratively with the District and the province and sold the 1.9 acres of land at a less than market value for Wadams Way as they believed it was the right thing to do for the community. The family have decided to utilize the property to its full potential and began the rezoning process. Mr. Cook advised that they are concerned about the amenity contributions the District is requesting and are asking Council to recognize the contribution the family made two years ago with the land sale.

Dave Smith further reported that the property owners will still have to undertake the subdivision requirements under the *Local Government Act*.

Committee Discussion:

- Discussion as to the goodwill made between the District of Sooke and the property owners during the land acquisition negotiations for Wadams Way and that Councils cannot fetter future Councils
- In context, if this property was to apply for subdivision or rezoning prior to construction of the Connector, the property owners would be responsible for half of the construction costs of Wadams Way; the road offers a direct benefit to the property
- Council will need to look at the amenities with a balanced approach that is agreed to by both parties
- There was due diligence with the previous Council and the land acquisition negotiations and agreement
- Council is open to future discussions as to what would be required as amenities with the rezoning of the property
- It is important to address the Church Road intersection location to ensure safety for existing and future residents who will be using the crosswalk and to also address drainage issues in that area
- What the estimated land value would be for the proposed roundabout at Church Road and Throup Road
- Concerns as to the parkland dedication in the rezoning application near the location of the Church Road and Throup Road roundabout

Mr. Smith clarified that this area was a stormwater collection area, not to be confused with a formal park.

- Concerns as to the amount of flexibility in the development and whether the applicants would be willing to go back to the drawing board to come up with a plan that would provide more certainty with the overall development. Having greenspace in the centre of the development would make more sense
- Discussion as to whether the development will be fee simple or 80% strata title as this will have an impact on what will happen on the property

Mr. Smith clarified that this is a comprehensive development zone application with fee simple lots. The park areas were identified working with the Planning Department and it was felt the location next to CASA would be the most suitable location.

- Discussion as to referral responses in particular the CRD Water response
- Discussion as to additional lighting on the multi-use trail along Church Road and a multi-use trail on the other side of Wadams Way included as part of the development of the property
- Concerns as to the proposed parkland in Area A

Mr. Smith explained that it is common practice to utilize stormwater retention areas as greenspace and that they be dedicated to the community as "park". The greenspace in Area A will be a stormwater retention area and will not take the place of a community park.

Public Input:

Gail Hall, Sooke resident, inquired as to the calculations for community amenities on the property in the staff report. Ms. Hall believes that the District of Sooke does not have the authority to require amenities other than through a Phased Development Agreement. Ms. Hall also inquired as to density bonusing.

ACTION ITEM: Mr. Howie to review the amenity contribution calculations in the staff report.

MOVED to recommend **THAT COUNCIL** direct staff to continue negotiations for amenities with the applicant for 2182 Church Road to require the applicant to dedicate the required land for a potential future roundabout at the Church Road/Thrup Road intersection, and complete upgrades to an interim standard to improve vehicular and pedestrian safety, and allow this work to count towards the amenity contribution as it provides a clear community benefit.

CARRIED UNANIMOUSLY



File No. PLN01123

DIRECTION REQUEST
COMMITTEE OF THE WHOLE
Meeting Date: September 8, 2015

To: Mayor and Council
From: Gord Howie, Chief Administrative Officer
Re: **Amenity Discussion - 2182 Church Road RZ Application**

SUGGESTED ACTION:

THAT COMMITTEE OF THE WHOLE receive this report for information;
AND provide direction to staff on which option to proceed with in the context of Policy No. 13.3, *Community Amenity Contribution Policy*.

1. Executive Summary:

The applicant is requesting that 2182 Church Road be rezoned to a Comprehensive Development Zone (CD Zone) to allow a mix of single family and multi family residential uses with a total site density capped at 133 units.

The applicants have requested a CD Zone that will provide more flexibility than a conventional residential zone, in order for a future owner/developer to more easily adapt to market conditions over time. The current owners do not wish to develop the site themselves.

In terms of land use, the overall concept is consistent with the *Official Community Plan (OCP)*, however, the owners of the property have not submitted an amenity contribution proposal that is consistent with Policy No. 13.3, *Community Amenity Contribution Policy (Policy No. 13.3)*.

The total amenity contribution is estimated at \$413,000. The owners have agreed to the affordable housing contribution of \$130,000 leaving a shortfall of \$283,000. The owner is suggesting that Council consider the value of the Wadams Way/Church Road dedications (a separate land transaction that occurred in 2012, where the District purchased the land for a sum perceived to be under value by the owner), as well as the future Church Road/Throup Road intersection dedication as the amenity contribution.

Details around the amenities proposed by the applicant are found in the attached correspondence.

Typically, road dedications that are critical to the growth of a community can be secured through a rezoning process, and dedicated to the municipality at the time of development with no compensation to the landowner.

Staff is looking for direction from Council on how to proceed with the application in the context of Policy No. 13.3.

2. Background:

The property, 2182 Church Road, is well situated for future development. It is 10.38 acres in size and is located in the centre of Sooke along two collector roads; Church Road and Wadams Way. The property is currently zoned R1 Large Lot Residential, which allows for 1000m² lots. It is located in an area of the community identified for growth and has access to servicing, including sewer.

The site is bounded to the north by a mobile home park, to the east by large lot residential dwellings, to the west by the Sooke Family Resource Centre and the St. Rose of Lima Church, and to the south the Town Centre and the newly constructed Wadams Way.

Currently, the site is occupied by one single family dwelling and two accessory structures with approximately 70% of the property cleared and used for grazing purposes. The property has been owned by the Wadams and Cook families for over 72 years.

3. The Proposal:

PROPOSED NEW ZONE

The owners have applied for a mixed residential CD Zone with the intent to allow a future developer the ability to more easily adapt to market conditions over time. The zone will provide flexibility in housing options for the site. The applicant has capped the density for the site at 133 residential units.

There are four different areas identified on the site (Areas A - D). Area A will be strictly single family residential (similar to that of the R3 Small Lot Residential Zone), Area C will be strictly multiple family residential (similar to that of the RM2 Zone), and Area B will allow for either single family or multiple family options. Area D shows future parkland dedication in compliance with the 5% parkland required as part of subdivision. All conventional setbacks, lot coverage and accessory uses are proposed.

AMENITIES

The *Community Amenity Contribution Policy* is applied to rezoning applications for residential uses where an increase over the base density is proposed. The amenities received are in exchange for an increase over the base density, and can be used by the District to address costs associated with growth. Amenity contributions take place at either subdivision (for single family) or building permit stage (for multi family).

The calculation: The most recent proposal includes provision of 133 dwelling units for the site. When applying the *Community Amenity Contribution Policy* to this application, the contribution is calculated as follows:

Base Density: 4.2ha x 12 units per ha = 50.4
Total site density = 133
Contribution calculation: (133 - 50.4) x \$5000 = \$413,000

The owners have agreed to contribute 10% of the site as affordable housing units, or cash in lieu at a rate of \$10,000 per unit for a total of up to \$130,000. This has been accepted as part of the amenity contribution. (\$413,000-\$130,000= \$283,000)

This leaves a shortfall of \$283,000 in anticipated amenity contributions.

WHAT CAN BE CONSIDERED AN 'AMENITY'?

As per Policy No. 13.3, an amenity can be "...parks and trail development, waterfront walkway, including a boardwalk, affordable housing, open space (in addition to statutory park dedications), day care facilities (typically not for profit), public art, park equipment, ALR property acquisitions, community gardens, parking structures, performing arts facility, green infrastructure, beautification projects, preservation of heritage structures, fire equipment and buildings and other amenities with a clear community benefit."

In lieu of providing the amenity under Policy No. 13.3 the owner may contribute cash, which is placed into an "Amenity Reserve Fund" established to complete projects as listed above, or construct works, as approved by Council, that provide a clear community benefit.

THE AMENITIES SHORTFALL

The applicant has asked that the District of Sooke consider, as an amenity, a perceived undervaluation in the purchase agreement for the land deal reached in the Wadams Way connector Road completed in 2013 (Letter from applicant attached).

The District responded with a letter stating that the current District of Sooke Council cannot take into consideration any previous land transaction during the review and evaluation process of the current rezoning application. It was reiterated that the previous land transaction was a separate and unrelated process.

It should be noted that typically, road dedications that are critical to the growth of a community are secured through a rezoning process, and dedicated to the municipality at the time of development with no compensation to the landowner.

4. Analysis:

OFFICIAL COMMUNITY PLAN

The *Official Community Plan* (OCP) land use designation of this site is Community Residential (CR). Land use policies for the CR designation support a mix of single and multiple-family residential. Ordinarily, the OCP supports a small, neighbourhood-scale commercial component in new developments. However, with this site's location at the edge of the Town Centre, and at the risk of the neighbourhood commercial component competing with town centre redevelopment, it was recommended that the site focus on residential development.

SERVICING

The subject properties can be serviced by CRD water, and the site is located within the District's Sewer Specified Area (SSA). A sewer serviceability review has been completed, which provided several options for servicing the property with sewer.

The applicant has submitted a Traffic Impact Assessment (TIA) that was prepared by Boulevard Transportation Group in January 2015, as well as a preliminary design for a future roundabout at Throup Road and Church Road. The road dedications and recommendations in the TIA will be secured by way of a S.219 Covenant.

In the last correspondence with the District, it was stated that "Frontage requirements along Church Road and Wadams Way are required under Bylaw No. 404, *Subdivision and Development Regulation Bylaw*". However, road improvements beyond the frontage of 2182 Church Road may be considered as an amenity contribution such as the proposed Church Road/Throup Road intersection re-alignment to an interim standard in order to improve vehicular and pedestrian safety at the intersection. If the owners would like to consider these

road improvements as part of the amenity contribution, a concept drawing including a cost estimate is to be submitted for review.

No concept drawing or cost estimate for road improvements (outside of Bylaw No. 404) have been presented by the applicant to date.

SUBDIVISION REQUIREMENTS

The applicant has indicated that the required 5% parkland can be dedicated to the District. In this case the land to be dedicated is approximately 2100m² and is shown on the concept plan.

ENVIRONMENTAL

A Riparian Areas Regulation Assessment Report (RAR) was prepared for the subject property in November 2014 by a Qualified Environmental Professional (QEP) from Brian Wilkes and Associates Ltd. Two watercourses bisect the subject property; one is located in the south-east corner and cuts across the property for approximately 65m. The second watercourse runs the length of the property parallel to the north property boundary. The RAR states that a 2 meter Streamside Protection and Enhancement area (SPEA) is appropriate for both watercourses. This report has been reviewed and accepted by Ministry of Environment. The applicant will be responsible for satisfying the recommendations within the RAR.

5. Legal Impacts:

If Council provides direction to move forward with a bylaw to rezone this property, District staff will draft a CD Zone consistent with the policies of the OCP, the language of Zoning Bylaw 600, and incorporate direction from Council regarding amenities.

The application cannot proceed with a bylaw until the Amenity Contribution has been determined. The type of amenity will determine the tools used to secure the amenity and can include Section 219 Covenants, an amenity zone and/or Housing Agreements.

6. Financial Impacts:

The most recent proposal includes provision of 133 dwelling units for the site. When applying the Community Amenity Contribution Policy to this application, the contribution is calculated as follows:

Base Density: 4.2ha x 12 units per ha = 50.4
Total site density = 133
Contribution calculation: (133 - 50.4) x \$5000 = \$413,000

The owners have agreed to contribute 10% of the site as affordable housing units, or cash in lieu at a rate of \$10,000 per unit for a total of up to \$130,000. This has been accepted as part of the amenity contribution and meets the policies of the OCP.

This leads to a shortfall of \$283,000 in contributions toward the amenity reserve fund.

7. Options for Council to Consider:

Council has three options to address the shortfall in the context of amenities;

1. Require the applicant to dedicate the required land for a potential future roundabout at the Church Road/Thrup Road intersection, and complete upgrades to an interim standard to improve vehicular and pedestrian safety, and allow this work to count towards the amenity contribution as it provides a clear community benefit. It is anticipated that the cost of the improvements at this intersection would satisfy Policy 13.3.

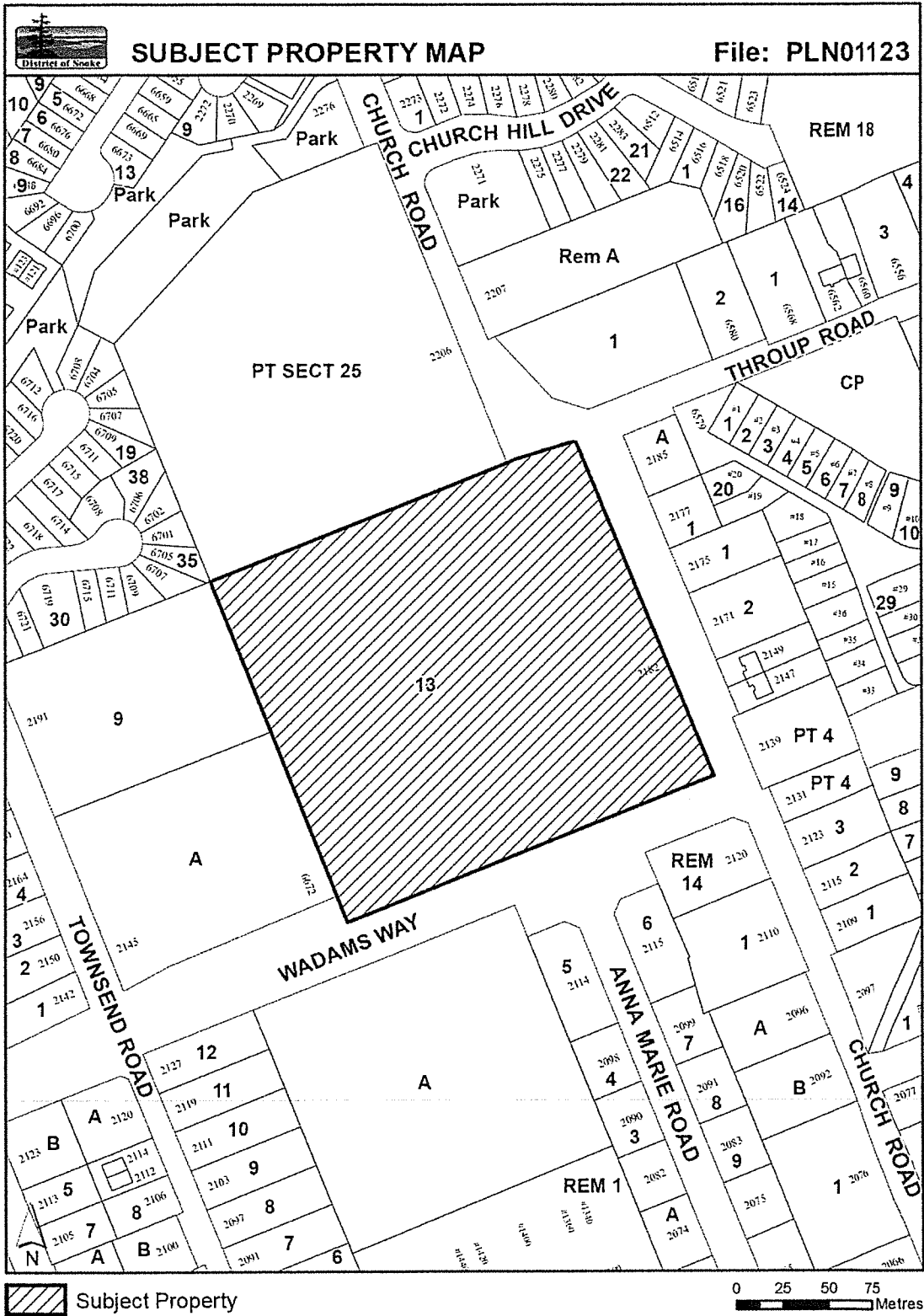
2. As per Policy No. 13.3, the applicants enter into an agreement to provide a cash contribution to the amenity reserve fund to the approximate value of the shortfall identified or as specified by Council. The Church Road/Throup Road dedication will continue to be a requirement, but will not be calculated as part of the amenity contribution.
3. At the applicant's request, allow the owner to proceed with the application based on their perceived undervaluation of the land transaction from 2012, and the value of the required Church Road/Throup Road dedication as the amenity contribution.

Attached Documents:

1. Subject Property Map
2. Summary of Referral Responses
3. Map showing four Zoning Areas (Jun 26, 2015)
4. Concept Plan for the site (Jun 26, 2015)
5. Preliminary design of Throup/Church Roundabout (Jun 10, 2015)
7. Letter dated Mar 17, 2015 from Applicant re: Amenity Contribution
8. Letter date stamped. May 19, 2015 from Applicant re: update to Amenity Offer
9. Letter dated Jun 2, 2015 from Gord Howie re: Response to Amenity Proposal
10. Letter dated Jun 22, 2015 from Peter Cook re: Request to speak to Council
11. Public Submissions dated January 21, 2015
12. Request for Service dated May 15, 2015



Gord Howie,
Chief Administrative Officer

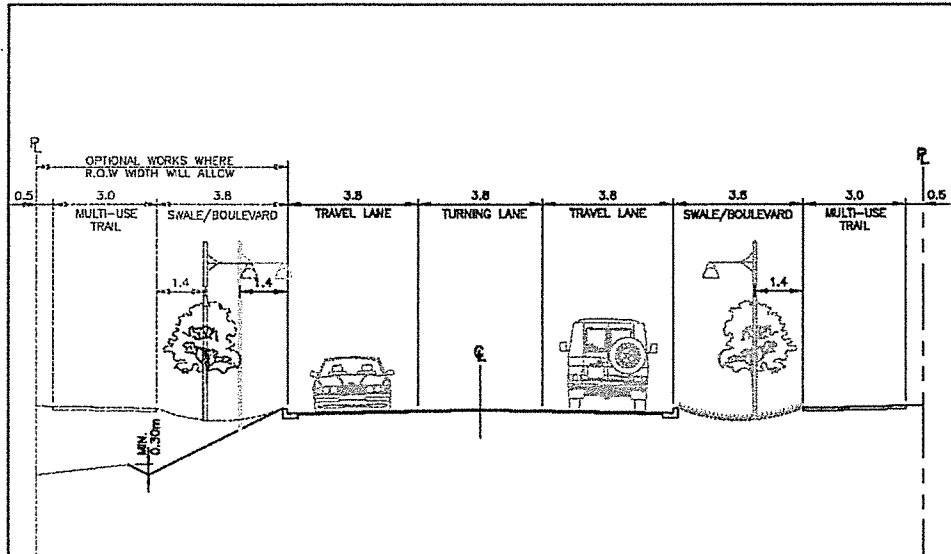


**SUMMARY OF COMMENTS RECEIVED FOR 2182 Church Road
IN RESPONSE TO DISTRICT OF SOOKE REFERRAL SENT February 4th, 2015
and updated version sent February 16, 2015**

EXTERNAL REFERRALS	
Agency	Comments
EPCOR	<ol style="list-style-type: none"> 1) The property is in the area of the sanitary system currently serviced by a 2" low pressure system only. 2) It would appear that any housing development on this property will require a lift station to get sewer from site to existing gravity flow. 3) The additional flow created by 378 people may affect the existing pinch points as identified in the sewer model. Engineering updates will need to be considered.
BC Hydro	No objections to the rezoning application.
Ministry of Transport and Infrastructure	The ministry has no objections to the proposed rezoning and has no additional requirements for approval. Please forward the certified bylaw forms to our office for completion at your convenience.
Canada Post	No response.
BC Transit	<ol style="list-style-type: none"> 1) The proposed site is located directly on a transit route and has a transit stop located opposite the property. 2) It is expected to be a significant trip generator. 3) The existing transit route, the 63 Otter Point Community Bus, currently provides one-way service and operates in a loop. This is a weekday-only, basic service route (4 trips per day) through rural Sooke. The route connects at Sooke Town Centre with the 61 Sooke/Langford/Downtown conventional service. 4) Particularly as the proposed development potentially includes higher density multi family residential units, in the future two-way service may be desirable on this route. Two-way service would require a new transit stop to be located on Church Road adjacent to this facility, and a shelter and bench would also be recommended. 5) The proposed densities are supportive of transit. 6) As the existing transit stops along Church Road are not universally accessible, it is recommended that accessible pads be installed. 7) Provisions should be made for room to accommodate a future transit stop, shelter, and bench. 8) BC Transit has no objection to the proposed development as it is consistent with transit-supportive land use.
Beecher Bay	No response.
CRD Water	<p>Community piped water can be supplied to the proposed development provided that the owner(s) is prepared to pay all necessary costs and fees authorized under CRD Bylaws for the supply and installation of a water distribution system capable of meeting all domestic and fire flow requirements, designed in accordance with CRD Specifications and Standard Drawings. The existing property is currently serviced with water by a 19mm (3/4") water service located at the property frontage on Church Road. The Owner shall pay all costs to abandon this service if not required for this development.</p> <p>If the proposal proceeds to the development stage, a detailed review of water servicing design drawings will be required, and a detailed statement of conditions will be provided.</p> <p>The CRD hydraulic computer model shows a fire flow of 15,000 L/min (3,300 l gpm) with at least 138 kPa (20psi) residual pressure in the water main</p>


	<p>adjacent to the fire hydrant (SFD196) located at the intersection of Church Road and Wadams Way.</p> <p>The Owners engineer will be required to calculate the fire flow requirements to confirm in writing that the CRD system is sufficient. The owners engineer should contact the District of Sooke to discuss hydrant location and orientation.</p> <p>If an increase in the level of fire protection is required to meet CRD Engineering Specifications and Standard Drawings, FUS or to meet DoS requirements, the Owner would be responsible for all costs associated with designing and upgrading the distribution system to provide the require flows.</p> <p>Depending on the intended use of the property, a DCC may apply to each of the new lots/units created by this development. This letter is for the purpose of providing you with information regarding the services available from the CRD, and should not be construed as either approval or rejection of the proposed rezoning by the CRD.</p>
Ministry of Environment	Few concerns with the proposed rezoning provided subsequent development follows the relevant best management practices. Also, recommendations in any Riparian Areas Regulation reports done for the property should be followed.
SEAPARC	No response.
T'souke Nation	No concerns.
Archeological Branch	<p>Provincial records indicate there are no known archaeological sites recorded on the property. Our records do indicate there is an area or archaeological potential in the south eastern portion of the property. Areas of archaeological potential indicate there is an increased likelihood for unknown/undocumented archaeological sites to occur at these locations. However, from the perspective of the archaeology branch, the zone of potential is not dense enough to warrant concern at this time. Therefore an archaeological study or permit is not required prior to development at this property.</p> <p>There is always a limited possibility for unknown archaeological sites to exist. Archaeological sites are protected under the Heritage Conservation Act and must not be altered or damaged without a permit from the Archaeology Branch. If any land altering development is planned, owners and operators should be notified that if an archaeological site is encountered during development, activities must be halted and the Archaeology Branch contacted.</p>
ALC	The site is not within the ALR and therefore the Agricultural Land Commission has no comment on the rezoning proposal.
RCMP	No response.
School District #62	No response.
Fortis BC	No conflicts have been identified. Please note that there is a gas main located within the road allowance of Church Road.
Shaw Cable	No response.
Telus	No response.
Building	No comments.
Fire	I have reviewed the rezoning proposal, and while there are likely many fire and life safety concerns to address, I am sure these will be done at the development permit and building permit stages of the application. As such, I have no concerns with this proposal.

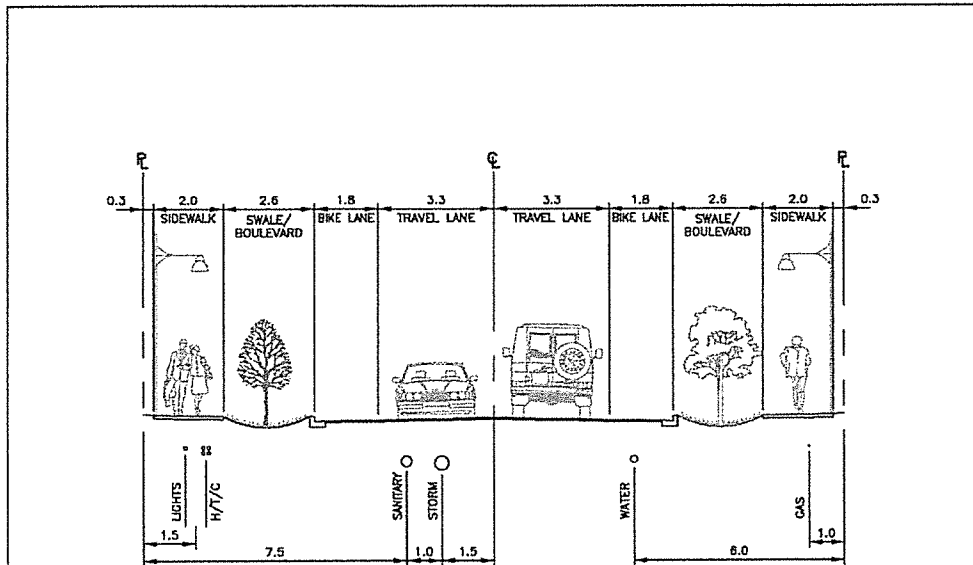
<p>Engineering</p>	<p><u>1.0 General</u></p> <ol style="list-style-type: none"> 1. Service the new development in accordance with the District of Sooke Bylaw 404, Subdivision and Development Standards bylaw, 2014, Suburban Area. 2. Road dedication required for the Church Road and Throup Road intersection to accommodate the ultimate intersection at this location. It is recommended in the 2009 Transportation Master Plan that this intersection be a roundabout. Intersection to be designed to the ultimate standard and appropriate land dedication provided prior to subdivision or development. 3. Church Road and Throup Road intersection to be designed and constructed to an interim standard to improve vehicular and pedestrian safety. 4. Environmental impacts must be mitigated as per the Ministry of Environment's <i>Develop With Care; Environmental Guidelines for Urban and Rural Land Development in British Columbia, 2012</i>. Any breach of an environmental nature must be reported to the Municipal Engineer immediately. <p><u>2.0 Surface Improvements</u></p> <ol style="list-style-type: none"> 1. AS required, applicant to submit an updated TIA to reflect actual proposed development. Costs related to the design and construction of the offsite road improvements as required, and noted in the TIA report are to be borne by the applicant. 2. Church Road frontage to be constructed to Connector standard, as per drawing SDD-R11, attached. 3. Wadams way frontage to be constructed to Connector standard including the optional works within the existing 25m road right of way, as per drawing SDD-R11, attached. Landscaped medians to be installed where no turning lane is required. 4. Install screening fence along the north and west property lines of 2182 Church Road. <p><u>3.0 Sanitary Sewer</u></p> <ol style="list-style-type: none"> 1. Prior to finalizing the rezoning process, the applicant, at their cost, is to coordinate with the District of Sooke for the completion of a Sanitary Serviceability Review to analyze the capacity of downstream sanitary sewers due to the increased density proposed. The costs relating to upgrading/installing of the downstream system, if required, will be borne by the applicant. <p><u>4.0 Greenspaces and Environmental</u></p>
	<ol style="list-style-type: none"> 1. District of Sooke mapping indicates that a wetland/creek exists within 30m of the property line and the proposed works. Recommendations of RAR #3353 dated November 1, 2014 complete with any revisions must be adhered to. The recommendations of Wilkes letter dated Feb 11, 2015 must also be implemented. 2. This development should be considered to provide for the dedication of a neighbourhood park, such as a community garden or dog park.



NOTES:


1. THIS SECTION IS A TYPICAL MID-BLOCK DESIGN. INTERSECTIONS ARE TO BE DESIGNED INDEPENDENTLY.
2. ALL CONSTRUCTION TO CONFORM TO MMCD SPECIFICATIONS AND DISTRICT OF SOOKE SUPPLEMENTS, AND BYLAWS.
3. TREES AND LIGHTING TO BE STAGGERED ALONG BOTH SIDES OF THE ROAD IN ACCORDANCE WITH ILLUMINATION ENGINEERING STANDARDS.
4. ORNAMENTAL STREET LIGHTS AS PER THE SERVICING REQUIREMENTS.
5. ELEMENTS OF THIS SECTION MAY BE RECONFIGURED ON NEW INSTALLATIONS AS ACCEPTED BY THE MUNICIPAL ENGINEER.

<p>TITLE:</p> <p>CONNECTOR</p>	<p>DATE:</p> <p>MAY 2014</p>	<p>DRAWN:</p>	 <p>District of Soke</p> <p>DWG No. SDD-R11</p>
	<p>SCALE:</p> <p>N.T.S.</p>	<p>APPROVED:</p>	



NOTES:

1. THIS SECTION IS A TYPICAL MID-BLOCK DESIGN. INTERSECTIONS ARE TO BE DESIGNED INDEPENDENTLY.
2. ALL CONSTRUCTION TO CONFORM TO MMCD SPECIFICATIONS AND DISTRICT OF SOOKE SUPPLEMENTS, AND BYLAWS.
3. PARKING MAY BE ADDED TO ONE OR BOTH SIDES AT THE DISCRETION OF THE MUNICIPAL ENGINEER. PARKING WILL BE 2.45m WIDE.
4. TREES AND STREET LIGHTS TO BE STAGGERED ALONG BOTH SIDES OF THE ROAD IN ACCORDANCE WITH ILLUMINATION ENGINEERING STANDARDS.
5. 2.0m SIDEWALK & 1.5m BIKE LANES WHERE REQUIRED PER THE PARKS AND TRAILS MASTER PLAN AND/OR TO MATCH EXISTING.
6. WHERE CURB AND GUTTER IS NOT REQUIRED AS PER THE SERVICING REQUIREMENTS, A 1.0m SHOULDER WILL BE INSTALLED.
7. ORNAMENTAL OR COBRA HEAD STREET LIGHTS AS PER THE SERVICING REQUIREMENTS.
8. ELEMENTS OF THIS SECTION MAY BE RECONFIGURED ON NEW INSTALLATIONS AS ACCEPTED BY THE MUNICIPAL ENGINEER.

TITLE: URBAN / SUBURBAN COLLECTOR	DATE: AUGUST 2014	DRAWN:	 District of Sooke
	SCALE: N.T.S.	APPROVED:	

WADAMS WAY CD ZONE

CD14

Purpose: This zone provides for a variety of residential uses. It is intended to be used for single-family detached, townhome, duplex, multi-family, and some associated and appropriately scaled neighborhood commercial development.

Permitted Uses:

General extraction and processing for on-site development and on-site and off-site municipal services directly attributable to the on-site development shall be permitted.

- a) Area A (Single Family / Duplex Residential)
- b) Single-Family Residential
- c) Single-Family Residential
- d) Single-Family Residential
- e) Single-Family Residential
- f) Single-Family Residential
- g) Single-Family Residential
- h) Single-Family Residential
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- v) Single-Family Residential
- w) Single-Family Residential
- x) Single-Family Residential
- y) Single-Family Residential
- z) Single-Family Residential

- a) Apartment building, per provisions of the RM2 Medium Density Multi-Family 2 zone
- b) Townhome, per provisions of the RM2 Medium Density Multi-Family 2 zone
- c) Assisted living facility, per provisions of the RM2 Medium Density Multi-Family 2 zone
- d) Cluster dwelling units, per provisions of the RM2 Medium Density Multi-Family 2 zone
- e) Density Multi-Family 2 zone
- f) Density Multi-Family 2 zone
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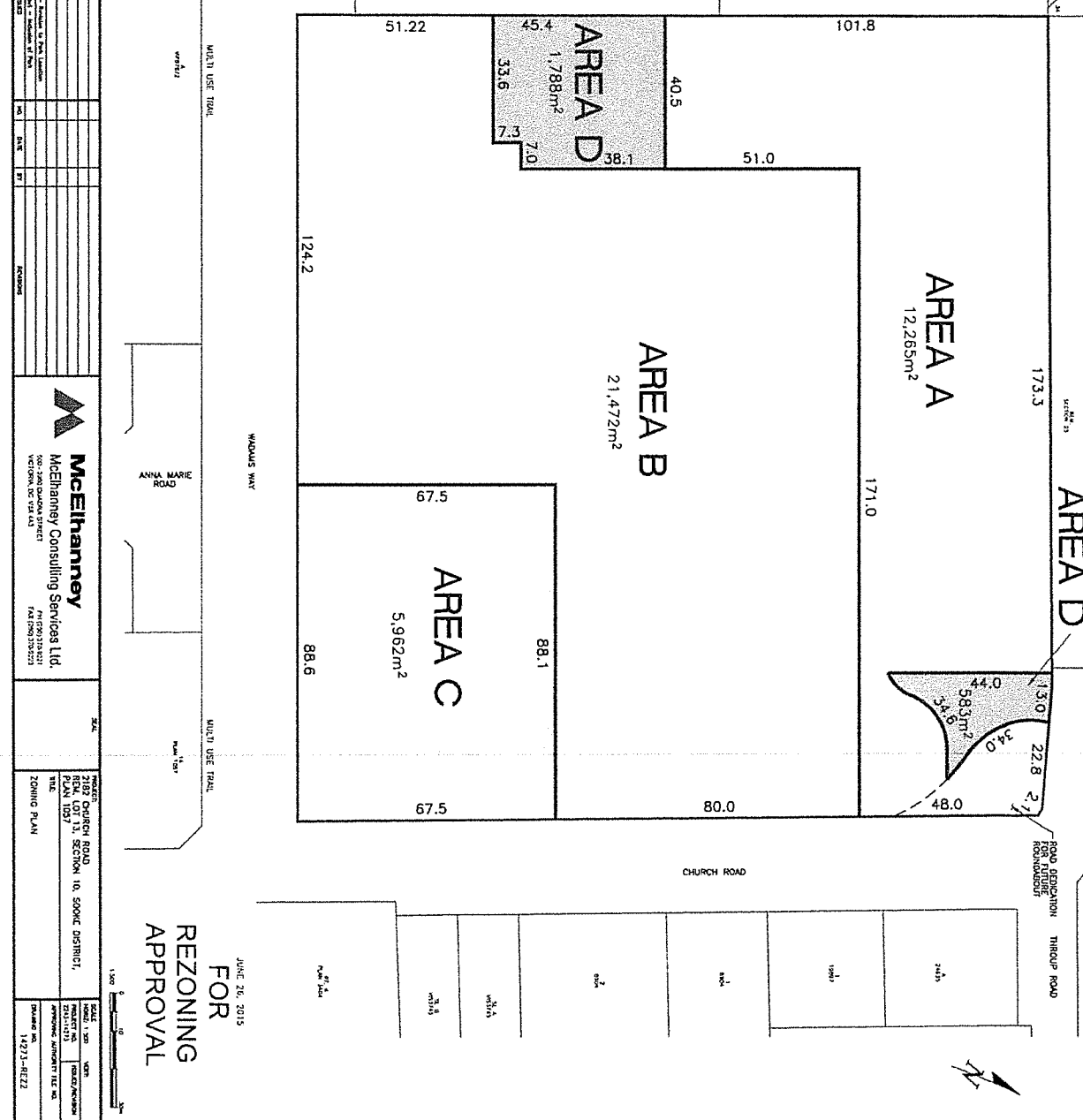
- a) Apartment building, per provisions of the RM2 Medium Density Multi-Family 2 zone
- b) Townhome, per provisions of the RM2 Medium Density Multi-Family 2 zone
- c) Assisted living facility, per provisions of the RM2 Medium Density Multi-Family 2 zone
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- y) Density Multi-Family 2 zone
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- a) Area A - Single Family Lot - 350 sq. meters
- b) Area B - Duplex Lot - 600 sq. meters
- c) Area C - Duplex Lot - 600 sq. meters
- d) Area D - Duplex Lot - 600 sq. meters
- e) Area E - Duplex Lot - 600 sq. meters
- f) Area F - Duplex Lot - 600 sq. meters
- g) Area G - Duplex Lot - 600 sq. meters
- h) Area H - Duplex Lot - 600 sq. meters
- i) Area I - Duplex Lot - 600 sq. meters
- j) Area J - Duplex Lot - 600 sq. meters
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- m) Area M - Duplex Lot - 600 sq. meters
- n) Area N - Duplex Lot - 600 sq. meters
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- w) Area W - Duplex Lot - 600 sq. meters
- x) Area X - Duplex Lot - 600 sq. meters
- y) Area Y - Duplex Lot - 600 sq. meters
- z) Area Z - Duplex Lot - 600 sq. meters

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- z) Area Z - Duplex Lot - 600 sq. meters

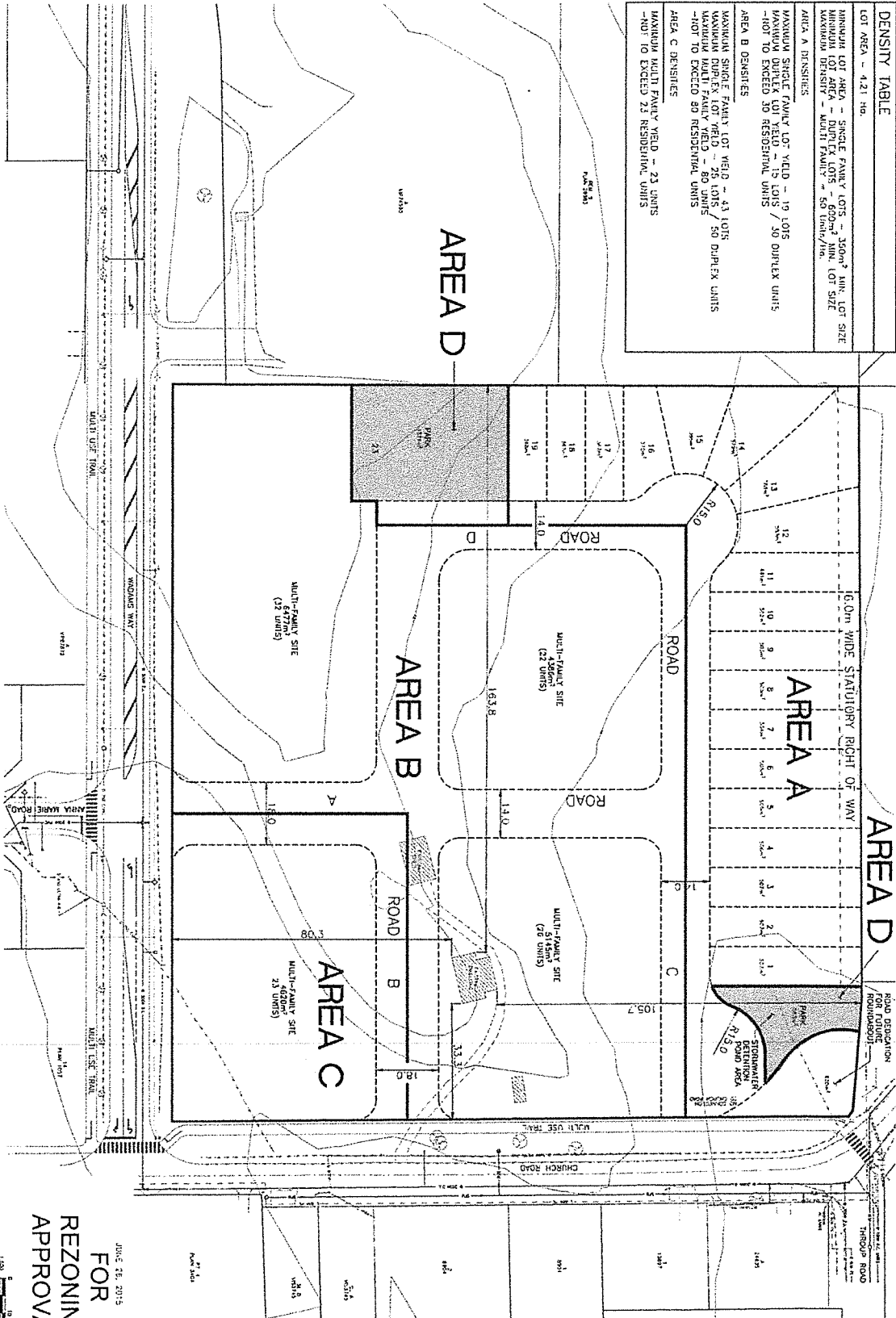


McElhanney
 McElhanney Consulting Services Ltd.
 100-248 DUNDAS STREET WEST
 TORONTO, ONT. M5G 1L4
 TEL: (416) 593-2222
 FAX: (416) 593-2223

FOR REZONING APPROVAL
 DATE: JUNE 26, 2015
 PROJECT: 2182 DUNDAS ROAD
 DISTRICT: 10, 5000C DISTRICT
 ZONING PLAN: CD14

NO.	DATE	BY	REVISION
1	2015-06-26	CDI	Initial Issue
2	2015-06-26	CDI	Final Issue

DENSITY TABLE	
LOT AREA - 4.21 Ha.	
MINIMUM LOT AREA - SINGLE FAMILY LOTS - 3500 ^{sq} MIN. LOT SIZE	
MINIMUM LOT AREA - DUPLEX LOTS - 6500 ^{sq} MIN. LOT SIZE	
MINIMUM DENSITY - MULTI FAMILY - 50 Units/Ha.	
AREA A DENSITIES	
MAXIMUM SINGLE FAMILY LOT YIELD - 19 LOTS	
MAXIMUM DUPLEX LOT YIELD - 15 LOTS / 30 DUPLEX UNITS	
-NOT TO EXCEED 30 RESIDENTIAL UNITS	
AREA B DENSITIES	
MAXIMUM SINGLE FAMILY LOT YIELD - 43 LOTS	
MAXIMUM DUPLEX LOT YIELD - 25 LOTS / 50 DUPLEX UNITS	
MAXIMUM MULTI FAMILY YIELD - 80 UNITS	
-NOT TO EXCEED 80 RESIDENTIAL UNITS	
AREA C DENSITIES	
MAXIMUM MULTI FAMILY YIELD - 23 UNITS	
-NOT TO EXCEED 23 RESIDENTIAL UNITS	



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NO.	DATE	BY	REVISION
1	2013-06-26	DB	ISSUE FOR PERMIT APPLICATION
2	2013-06-26	DB	ISSUE FOR PERMIT APPLICATION
3	2013-06-26	DB	ISSUE FOR PERMIT APPLICATION

PROJECT: CHURCH ROAD REDEV. LOT 13, SECTION 10, 5000th DISTRICT.
 PLAN 1007
 FILE: APPROVING AUTHORITY FILE NO.
 SITE PLAN & CONCEPTUAL LAYOUT

DATE: 14/2/13-RECI

Mceilhannney
 Mceilhannney Consulting Services Ltd.
 7400 SHEPPARD AVENUE EAST, SUITE 100
 SCARBOROUGH, ONTARIO M1S 1T5
 TEL: (416) 291-1111
 FAX: (416) 291-1112

FOR
 REZONING
 APPROVAL

March 17, 2015

File No.: 14-273 (2)

District of Sooke
Planning Department – Katherine Lesyshen, MCIP, BA
2205 Otter Point Road
Sooke, B.C. V9Z 1J2

Dear Katherine:

RE: 2182 Church Road – Amenities, Affordable Housing and Parkland

In 2013 the registered owners of the property located at 2182 Church Road agreed to sell 0.777 ha. (1.92 acres) of their property located on their southern and eastern boundaries to the District of Sooke to allow for the creation of Wadams Way and the expansion of Church Road. In order to expedite the process and avoid a lengthy expropriation process the registered owners accepted \$175,000 as payment for the land.

At the time the owners acknowledged that the payment was considerably less than the market value for the property even under the current zoning (R1 Large Lot Residential). In their discussions with politicians and staff they came to the conclusion that it was the right thing to do and although there could be no agreements it was understood that when an application came forward to rezone and develop their property their generosity would be taken into consideration.

It is with that spirit of cooperation we ask that you review our proposal for amenity contributions, park dedication and affordable housing contributions.

Land Sale / Purchase for Wadams Way / Church Road - Development and Expansion

1. Area of Land Purchased:	0.777 ha. (1.92 acres)
2. Purchase Price:	\$175,000
3. Estimated Number of Lots under R1 Zone:	7 lots
4. Estimated Sale Price of Serviced Lot:	\$169,900 per lot
5. Estimated Cost of Lot Servicing:	\$60,000 per lot
6. Estimated Cost of Unserviced Lot:	\$109,900 per lot
7. Total Unserviced Cost of Purchased Land:	\$769,300
8. Additional Value of Road Dedication Amenity:	\$594,300 (\$769,300 - \$175,000)

#500 – 3960 Quadra Street
Victoria, B.C. V8X 4A3
Phone: 250-370-9221



Community Amenity Contribution Policy

9. Maximum proposed density:	138 dwellings
10. Based density:	49 dwellings
11. Maximum dwellings in Excess of Base Density:	89 dwellings
12. General Amenities Reserve Fund Contribution:	\$5,000 per dwelling ¹
13. Total Amenity Contribution:	\$445,000 ²
14. Additional Value of Road Dedication Amenity :	\$594,300
15. Net Remaining Road Dedication Amenity :	\$149,300 (\$594,300 – 445,000)

Park Dedication

16. Site Area of Proposed Development	4.21 ha. (10.40 acres)
17. Proposed Park Dedication	1,750 sq.m (0.43 acres) or 4.2%
18. Net Remaining Road Dedication Amenity:	\$149,300 = 0.88 of a lot or 0.088 ha.
19. Proposed Park Dedication plus Net Remaining Road Dedication Amenity:	0.175 ha.+ 0.088 ha.= 0.263 ha. or 6.25%

Affordable Housing Contribution

20. Maximum Residential Density:	138 dwellings
21. Maximum Number of Affordable Dwellings:	14 units (10%) ³
22. Cash in Lieu Affordable Housing Contribution:	\$10,000 per dwelling ³
23. Total Maximum Cash in Lieu Contribution:	\$140,000

¹ Affordable Housing Units or Cash in Lieu are exempt

² Amount Based on no Affordable Housing Units or Cash in Lieu

³ A combination of Affordable Housing Units and Cash in Lieu

To summarize, the Road Dedication Purchase in 2013 suggests that a community amenity has been provided in the amount of \$594,300. That unrealized amount should be considered as a payment for future community amenities and park dedication. In addition we propose a contribution of a maximum of 14 affordable dwellings or a cash in lieu payment of \$10,000 per affordable housing unit.

I look forward to discussing these further with you on Thursday afternoon and in the meantime you have any questions please give me a call.

Sincerely,
McElhanney Consulting Services Ltd.

Dave Smith, MCIP, RPP
Senior Planner, Municipal

May 15, 2015

File No.: 14-273 (2)

District of Sooke
Planning Department – Katherine Lesyshen, MCIP, BA
2205 Otter Point Road
Sooke, B.C. V9Z 1J2

Dear Katherine:

RE: 2182 Church Road – Amenities, Affordable Housing and Parkland

Further to our letter dated March 17, 2015 we would like to provide further clarification regarding our project and in particular our proposed amenity and affordable housing contributions. By way of this letter we would like staff to develop their report accordingly and forward our proposal on to the Committee of the Whole for their review.

In 2013 the registered owners of the property located at 2182 Church Road agreed to sell 0.777 ha. (1.92 acres) of their property located on their southern and eastern boundaries to the District of Sooke to allow for the creation of Wadams Way and the expansion of Church Road. In order to expedite the process and avoid a lengthy expropriation process the registered owners accepted \$175,000 as payment for the land.

At the time the owners acknowledged that the payment was considerably less than the market value for the property even under the current zoning designation (R1 Large Lot Residential). In their discussions with politicians and staff they came to the conclusion that it was the right thing to do and although there could be no agreements it was understood that when an application came forward to rezone and develop their property their generosity and cooperation would be taken into consideration in so far as future amenity contributions.

It is with that spirit of cooperation we ask that you review our proposal toward contributions to amenity and affordable housing. Our proposal includes additional park and future roundabout dedications, the construction of a future walking trail and vegetated swale, and contributions towards affordable housing. We are not proposing any additional cash in lieu contribution towards amenities.

A. Land Sale / Purchase for Wadams Way / Church Road - Development and Expansion

1. Area of Land Purchased:	0.777 ha. (1.92 acres)
2. Purchase Price:	\$175,000
3. Estimated Number of Lots under R1 Zone:	7 lots
4. Estimated Sale Price of Serviced Lot:	\$169,900 per lot
5. Estimated Cost of Lot Servicing:	\$60,000 per lot
6. Estimated Cost of Unserviced Lot:	\$109,900 per lot
7. Total Unserviced Cost of Purchased Land:	\$769,300
8. <u>Additional Value of Road Dedication Amenity:</u>	<u>\$594,300 (\$769,300 - \$175,000)</u>

#500 – 3960 Quadra Street
Victoria, B.C. V8X 4A3
Phone: 250-370-9221



B. Additional Parkland Dedication Beyond 5%

9. Site Area of Proposed Development	4.21 ha. (10.40 acres)
10. Proposed Park Dedication	2,961 sq.m (0.73 acres) or 7.033%
11. Additional Park Dedication beyond 5%	2.033% or 856 sq.m (0.211 acres)
12. Estimated Number of Lots under CD zone	2 lots
13. Estimated Cost of Unserviced Lot	\$76,250 per lot
14. Value of Additional Parkland Dedication	2 lots x \$76,250 = \$152,500

C. Future Roundabout Dedication

15. Site Area of Proposed Development	4.21 ha. (10.40 acres)
16. Future Roundabout Dedication	263 sq.m (0.064 acres) or 0.624%
17. Estimated Number of Lots under CD zone	0.75 of a lot
18. Estimated Cost of Unserviced Lot	\$76,250
19. Value of Future Roundabout Dedication	0.75 of a lot x \$76,250 = \$57,187

D. Future Walking Trail¹ and Swale Construction

20. Dimensions and Area of Walking Trail	1.5m x 410m = 615 sq.m
21. Cost of Walking Trail ²	615 sq.m x \$40 = \$24,600
22. Cost of Walking Trail Fencing	410m x \$85 = \$34,850
23. Cost of Swale Construction ³	210m x \$100 = \$21,000
24. Value of Future Walking Trail and Swale	\$80,450

E. Value of Future Amenity Contributions (B, C and D) = **\$290,137**

F. Affordable Housing Contribution

25. Maximum Residential Density:	129 dwellings
26. Maximum Number of Affordable Dwellings:	13 units (10%) ⁴
27. Cash in Lieu Affordable Housing Contribution:	\$10,000 per dwelling ⁴
28. Total Maximum Cash in Lieu Contribution:	\$130,000

¹ Trail to be constructed as per Subdivision and Development Standards Bylaw, 2014, Schedule 8 Sidewalks and Trails with a travelled trail width of 1.5m consisting of compacted native soils with a packed quarry fines surface.

² Amount based on clearing, grubbing, gravel application

³ Amount based on providing an open swale along the northern property line and re-vegetated with native species.

⁴ A combination of Affordable Housing Units and Cash in Lieu permitted

To summarize, the Road Dedication Purchase in 2013 suggests that a community amenity has been provided in the amount of \$594,300. That unrealized amount should be considered



as a contribution toward future community amenities for this project. Furthermore, property dedications towards additional parkland and a future traffic roundabout as well as the construction of the future walking trails and a vegetated swale will form our amenities contributions package. All together our amenity contributions as described above total \$884,437 plus a potential cash contribution towards affordable housing of \$130,000.

We look forward to presenting our proposal to the Committee of the Whole and in the meantime you have any questions please give me a call.

Sincerely,
McElhanney Consulting Services Ltd.

Dave Smith, MCIP, RPP
Senior Planner, Municipal



COPY SCANNED

2205 Otter Point Road, Sooke, British Columbia, Canada V9Z 1J2

Phone: 250-642-1634 • Fax: 250-642-0541 • Email: info@sooke.ca • Website: www.sooke.ca

June 2, 2015

File No. PLN01123

McElhanney Consulting Services Ltd.
#500-3960 Quadra Street
Victoria BC V8X 4A3
(sent via email to dsmith@mcelhanney.com)

Attention: Dave Smith, MCIP, RPP
Senior Planner and Project Manager

Dear Mr. Smith:

Re: 2182 Church Road Rezoning Application (PLN01123)

I am writing in response to your letter dated May 19, 2015 regarding the rezoning application at 2182 Church Road. We can appreciate that there is a history regarding the sale of land to the District in 2013 to facilitate the Wadams Way road connection. However, the District cannot take into consideration the previous land transaction during the review and evaluation process of your rezoning application. The land transaction was a separate and unrelated process.

Amenities Calculation

The updated proposal includes provision of 129 dwelling units for the site. When applying the *Community Amenity Contribution Policy* to this application, the contribution is calculated as follows:

Base Density: 4.2ha x 12 units per ha = 50.4

Total site density = 129

Contribution calculation: $(129 - 50.4) \times \$5000 = \$393,000$

Amenity Proposal

You have indicated that the owners would like to contribute an additional 856m² of parkland (above the required park dedication of 5%) in the form of linear trail on the north and west boundaries of the property, the road dedication for a roundabout at Church and Throup Rds., and the construction of a walking trail and swale for a total valuation of \$290,137. The owners are also willing to contribute 10% of the site as affordable housing units, or cash in lieu at a rate of \$10,000 per unit for a total of up to \$130,000. This is a total contribution package of \$420,137.

The contributions for affordable housing for \$130,000 can be included as part of this contribution package at the rate submitted. The other tangible contributions need further discussion.

1. Road dedications that are critical to the growth of the community are secured through every rezoning application. This land is dedicated to the municipality at the time of first development - with no cost to the tax payer. As such, required road dedications cannot be included in the calculation as part of an amenity contribution.

.../2

Additionally, impact to the property directly across Church Road has to be minimized and the road alignment and "future roundabout location" shown on DWG 14-273 RAB dated 2015-04-10 must be shifted to the south west. Additional road dedication from the northern corner of 2182 Church Road is to be provided to allow for an improved alignment of Church Road to improve pedestrian and vehicular safety.

OPTIONS:

Frontage requirements along Church Road and Wadams Way are required under Bylaw No. 404, *Subdivision and Development Regulation Bylaw*. However, road frontage improvements beyond the frontage of 2182 Church Road may be considered as an amenity contribution. If the owners would like the District to consider road improvements as part of the amenity contribution (interim or otherwise), a concept drawing, including a cost estimate, of frontage improvements beyond the subject property can be submitted for review.

2. The owners have agreed to contribute more park land through subdivision than the required 5%; however, the location, configuration and trail connections within the proposed parkland is not suitable to the District for the following reasons:
 - a) The District's *Parks and Trails Master Plan* does not indicate a need for a trail in this location; an existing multi-use trail along Church Road and the proposed multi-use trail along the north side of Wadams Way will provide adequate pedestrian and cycling movement. Also, the Ponds Corridor Trail located 225 metres to the north of this proposed trail already connects Church Road to Townsend Road.
 - b) Construction of a narrow corridor trail along a fence line causes concerns for safety and noise.
 - c) The proposed east-west alignment leads trail users to private property to the west, which is not a best practice in trail design, unless the adjacent property owner (St. Rose of Lima Church) is amenable to this concept, and is willing to provide a registerable Statutory Right of Way over their parcel to provide public pedestrian access to Townsend Road.

OPTIONS:

This area is seen as desirable for a centrally located community park. If the owners are willing to contribute above the required 5%, the District could consider that as part of the amenity contribution, but please consider the following:

- a) Eliminate the proposed trail connections.
- b) Redesign to concentrate parkland dedication adjacent to the CASA site and existing parking.
- c) Redesign to concentrate parkland dedication adjacent to the stormwater area and existing trail connections on Church Road.
- d) Consider either a community garden or off-leash dog park with associated facilities.
- e) Consider a cash contribution toward infrastructure going into the 5% parkland required at subdivision.

.../3

McElhanney Consulting Services Ltd.
June 2, 2015
Page 3

Amenity valuations, when proposed as tangibles, need to be approved by our finance department prior to proceeding.

Land Use

Ordinarily, the *Official Community Plan* (OCP) supports a small, neighbourhood-scale commercial component in a new residential subdivision. However, with this site's location at the edge of the Town Centre, and at the risk of the commercial component competing with town centre redevelopment, it is recommended that the commercial component in the Area C be removed.

For reference, Sooke's Town Centre Plan, 2009 includes the following policy that supports this position:

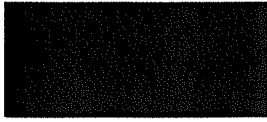
- (p. 15) Concentrate retail uses, personal services and entertainment within the Town Centre.
- (p. 18) Concentrate community services and facilities in the Town Centre.
- (p. 15) Limit further rezoning for commercial use of properties outside the established commercial core.
- (p. 58) Promote the vitality of the Town Centre (2008 Town Centre Plan) and encourage commercial growth on the waterfront and in the Town Centre.

The District would like the opportunity to continue working with you to determine an amenity package that is suitable to all parties. I trust this clarifies the District's position in relation to your amenities and land-use proposal. Please advise how you wish to proceed.

Sincerely,


For: Gord Howie
Chief Administrative Officer

Peter Cook



June 22 2015

Attn. Gord Howie, Chief Administrative Officer
District of Sooke
2205 Otter Point Rd.
Sooke BC
V9z 1J2

Re. 2182 Church Road. Rezoning (PLN01123)

Dear Mr Howie

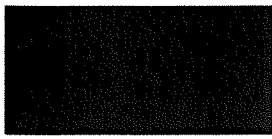
Let me introduce myself. My name is Peter Cook, I am a property owner in Sooke, the property is 2182 Church Road. (Wadams Farm). I am writing on behalf of my uncle and brother who are joint owners of the property. I am writing in response to your letter of June 2nd to our consultant Mr Dave Smith of McElhanney Consulting Services Ltd.

I will respond to some individual points in your letter and i will tell you how we intend to proceed. First I will give you a bit of history, some of which you may have heard before.

The Wadams family has owned the 10 acre+/- at 2182 Church Road for over 70 years. Peter and Olive Wadams were pillars of the young community and were very involved making sure the community came first. We had been in no hurry to do anything on the property beyond farming. We were approached by a group approximately 5 years ago who were interested in building an assisted living development. That plan never went through but in the process we were made aware of the District of Sooke's Connector Road Plan. Basically it was to divide up our property with a diagonal connector road at the time the property was sold. We worked closely with the District staff and some Councilors to register our concerns over the damage that would impose on us if and when we sold the property.

During these meetings we were made aware that the District was very interested in constructing this portion of the connector in the short term. We agreed to subdivide and sell to the District of Sooke 0.78 hectares (1.92acres) in order to allow for the creation of Wadams Way as well as the multi use trail along our Church Road Frontage. We concluded the sale at a substantially lower than market price for the benefit of the District of Sooke's project and for future considerations on parkland dedications/amenity contributions when we decided to rezone the property. Inclusion of the property in the Town core was also proposed as fitting the OCP.

Peter Cook



We have been working with our consultant and District of Sooke staff to present a Comprehensive Development Plan that aligns with District of Sooke OCP. When we met with staff to discuss amenities and parkland dedication, we were expecting to see goodwill across the table. We expected give and take for the benefit of both the District of Sooke and ourselves, sadly we were essentially shutdown. We understand that staff must work within policy. We were told the slate is clean and that they will treat us the same as any other developer. To say we were surprised is an understatement. We now understand why Sooke has declining house starts and stalled projects.

We do not want to develop this land. We are applying to get the existing zoning changed for the following reasons:

- 1) Bring zoning in line with your OCP
- 2) Provide a flexible Comprehensive Development opportunity by making the property marketable to prospective experienced developers
- 3) To allow the District of Sooke to grow as a community and increase its tax base

On April 20th we met with the Mayor and your staff to discuss this impasse, I travelled from Vancouver and my Uncle flew from Calgary believing this meeting to be critical to keep this project moving. We were told that our position on amenities would be considered at council level and that with some trails and pathway connections plus a concept for a roundabout that we could have a project acceptable to the community. We took the results of that meeting and at great expense to ourselves had our consultant rework the layout and design your round-about. When I read your response to our application I was stunned. Since the first meeting with Sooke District we have consistently been trying to work toward a fair resolution, a "win win". This involves give and take "collaboration" by both parties. Since submitting our application we sense we are in a "combative" situation. We have had time to reflect and take the direction of your letter, we may redesign the layout and round-about at our expense, we may dedicate more land for park but at the end of the day we are finding that the unreasonable rezoning process in Sooke is eroding the land at a rate where the project is simply not worthwhile for us as property owners. We can farm it till the "cows come home", the cows will be happy to munch grass there for another 70 years. This however does not move your community plan forward, this does not allow us to move forward. The rezoning proposal will come before Council eventually, we want (as we always have) to achieve a "win win" for the District and ourselves. We have land but little money and we will present our case that the previous land transaction while a "separate" transaction is very much related to this application. We have studied the *BC Ministry of Community, Sport and Cultural Developments* paper on *Community Amenity Contributions*. We see many references to "flexibility" "Special Circumstances" and negotiation. We see best practises and practises to be avoided. We can only hope that as a community in this province that the District of Sooke would abide by these guidelines.

COPY

District of Sooke
JAN 21 2015
Received



District of Sooke

2205 Otter Point Road, Sooke.

To the Mayor and Council.

Original Document to File No. 0220-01
January 16, 2015

For Action by:	CC	Agenda	Other
Mayor/Council	<input checked="" type="checkbox"/>		
Council Reader File	<input type="checkbox"/>		
CAO	<input checked="" type="checkbox"/>		
Corp Services	<input type="checkbox"/>		
Engineering	<input checked="" type="checkbox"/>		
Finance	<input type="checkbox"/>		
Planning	<input type="checkbox"/>		
Fire	<input type="checkbox"/>		
Other	<input type="checkbox"/>		

Re: Pedestrian safety corner of Throup Rd. and Church Road

We have mentioned this dangerous S curve at the corner of Throup Road and Church to the past town representatives, and have seen no work done to improve it. The space to walk is exceedingly narrow. We have seen people walking, riding scooters, pushing buggies, going to and from school, with the traffic , (therefore, not seeing it). The children walk abreast without a care in the world.

All that is needed is a culvert, and some gravel to make it safe. When we mentioned it to past District representatives, we were told that it would soon have a roundabout. That was several years ago. We were also told by another that it would be too expensive. Really? Even so, it must be done.

We know that a vehicle ended up in the ditch straight off Church while probably speeding. Why wait for someone to die before addressing this simple issue. Now we have a crosswalk from the trail, which has brambles that impedes visibility for vehicles heading to town.

The curve needs a street light as well as several reflective arrows. If you didn't know the S curve was there, you would be in a lot of trouble! Plus, people dress in black, and can't be seen at night!

Also, walking on to Helgeson from Church is another example of an open ditch which is death defying. There is nowhere to walk around the bend, and one must listen and peek around the corner to see if a vehicle is taking the corner.

We are sure that you all realize that this town for the most part is dangerous to walk, ride bikes, run, use a scooter, go to school, push a buggy, or even drive. This issue is certainly not a project that can be put off any longer. The people have identified the importance of safe streets several times over many years. If sidewalks can't be implemented at a certain dangerous intersection right away, then the culverts need to be put in, trees and hedges cut back, and wide shoulders made available now.

We suggest that the Mayor and Council drive, or even better, take walks around the little town of ours to identify dangerous shoulders of the roads.

Again, please look into filling the S curve where Throup meets Church ASAP.

Nancy Most

Jack Most



Aug 25, 2015
9:07 AM

District of Sooke
ENGINEERING DEPARTMENT

ORIGINAL
3009

REQUEST FOR SERVICE

Entered By JOYCE MEIJA May 15, 2015 11:27 AM Class STREETS
Assigned To ELISABETH NELSON May 15, 2015 11:30 AM Problem GENERAL
Follow Up NO Bring Forward Priority NORMAL Reference _____

LOCATION	REQUESTOR
CHURCH RD/THROUP RD CHURCH RD/THROUP RD	
	Phone 1: 

CALL DETAIL
Crosswalk and sidewalk concerns for children walking to Sooke Elementary from Townsend Rd.. Intersection of Church/Throup crosswalk very unsafe as well as Church/Country crosswalk. Unsafe passage for children along Church Rd. Speeding vehicles. Advised to email/write the Mayor and/or request delegation as several from Sooke Mommies FB concerned about walking safety. She's experienced a few very close calls of being hit in crosswalks.

INSTRUCTIONS

Actions and Remarks

COMPLETION	Completed by	Completed Date
	_____	____/____/____ : ____ Year Month Day Hour Min

FOLLOW UP	Follow Up by	Follow Up Date
	_____	____/____/____ : ____ Year Month Day Hour Min